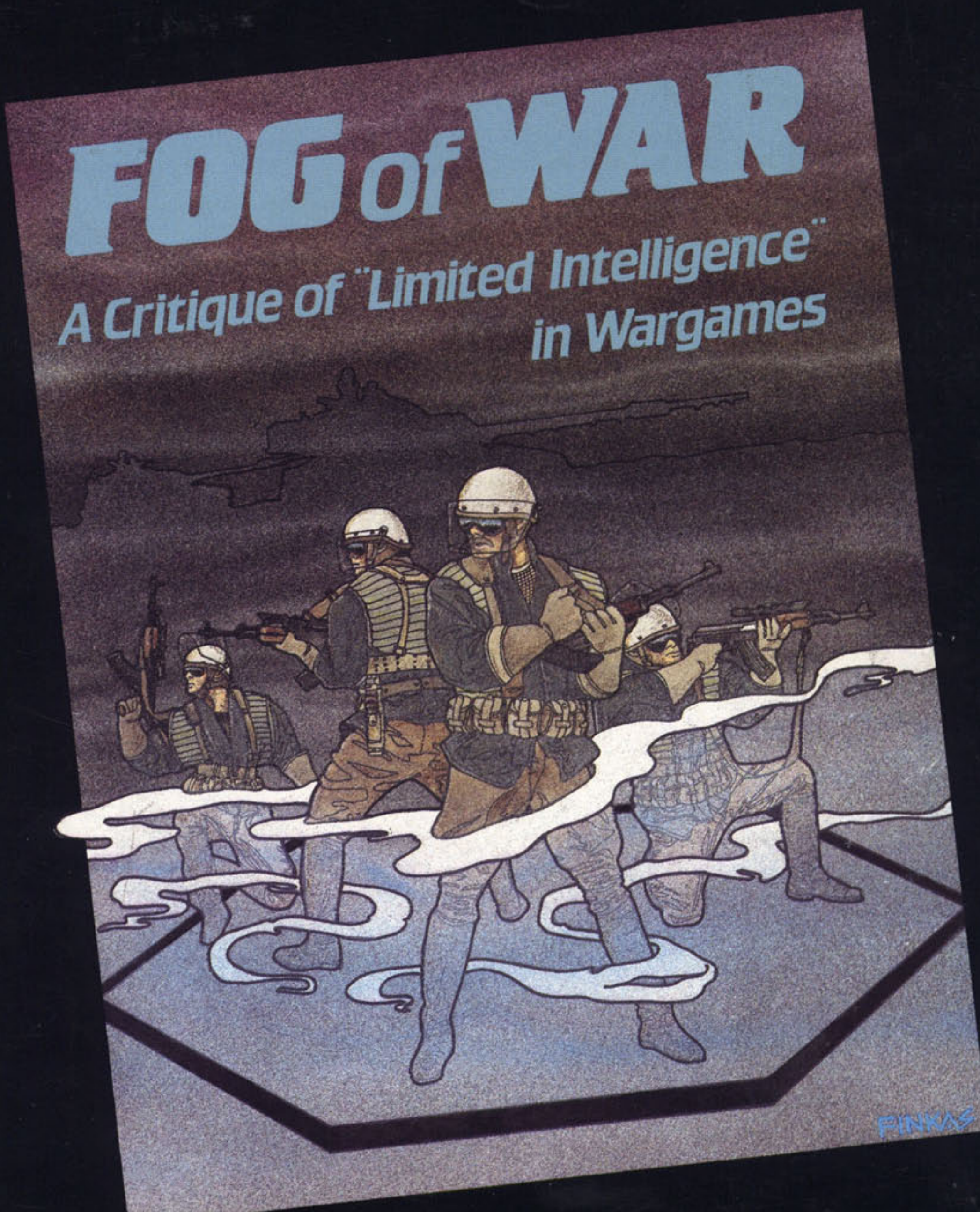
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COMPUTER GAMING WORLD

THE JOURNAL OF COMPUTER GAMING



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Vol. 5 No. 4 **Sept-Oct 1985**

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Psalm 9: 1-2

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FEATURES

DEPARTMENTS

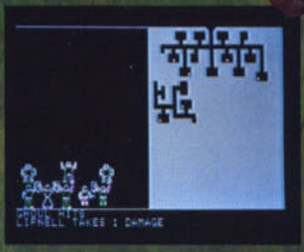




An attack by killer bees in the colorful countryside.



The wave of deadly monsters continues as dwarfish Kobolds threaten your party.



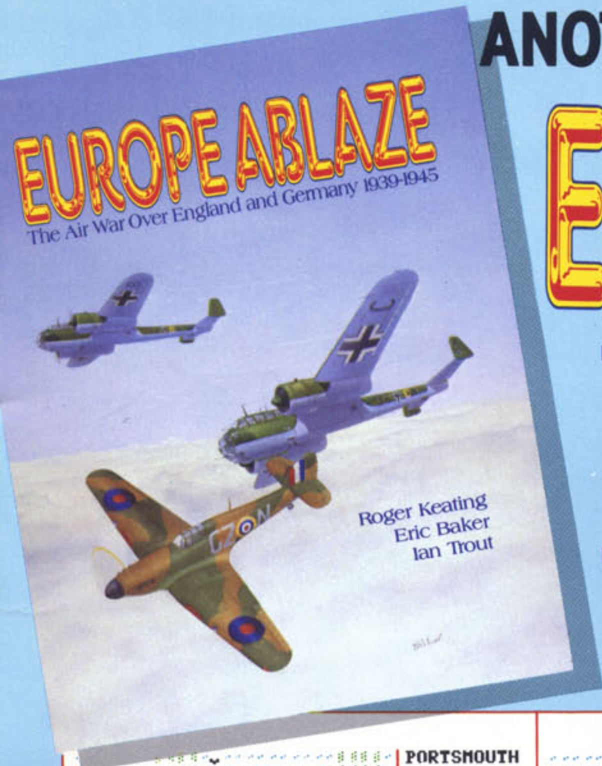
One of your comrades is injured by Ghouls during a search of the dungeons.



A sample composition of your party showing race, class and status.

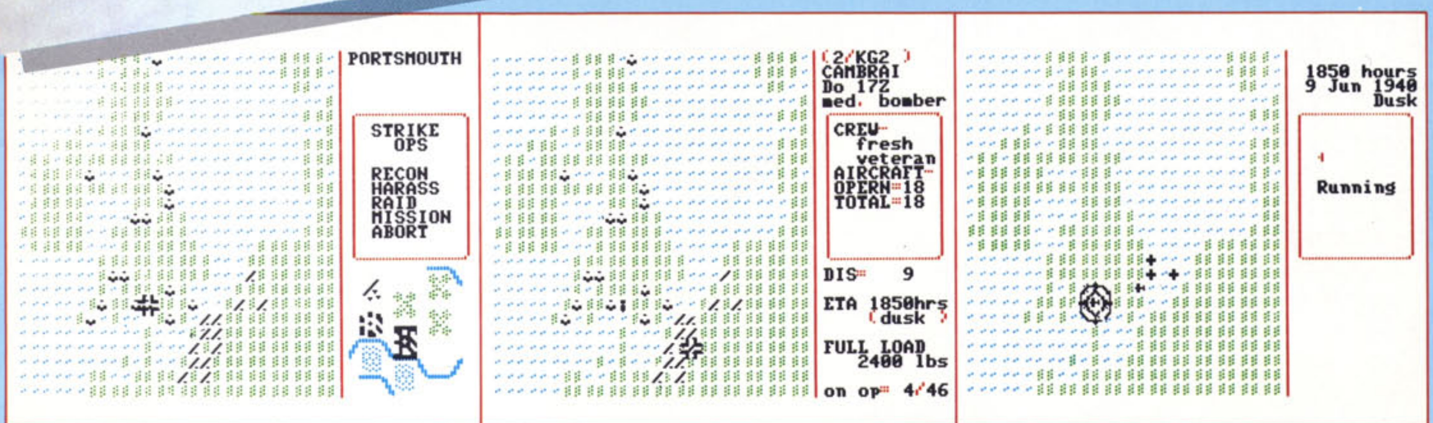
Circle Reader Service #2

STRATEGIC STUDIES GROUP INVITE YOU TO ENJOY ANOTHER FINE HISTORICAL SIMULATION



EUROPE ABLAZE

THE AIR WAR OVER ENGLAND AND GERMANY 1939-1945...



EUROPE ABLAZE is a complete game system designed to bring to life the vital struggle in the air which raged over Europe for almost five years.

Three major scenarios, selected from the various phases of the war, are presented to simulate the changing fortunes of battle as Britain, at first beleaguered by an overwhelming Luftwaffe, finally becomes the bastion from which American and British bombing forces wreak havoc upon the German war machine.

Each scenario offers up to six command positions per side, any or all of which may be computer controlled. The player takes the roll of C in C (Air Forces) and/or up to five subordinate commands. The result is an entertaining and rewarding experience for either solitaire or group play.

Major bombing missions are planned twice per day (daylight ops at midnight, night ops at noon) and require target selection, course plotting, speed and H hour determination and finally squadron allocation. Other operations available to strike aircraft include harassment, raid, and recon missions.

Fighter aircraft perform intercept and patrol (both standing patrols and intruder patrols) ops in response to ground and radar sightings. These ops can be launched at any time.

Targets range from city centres (population, industry, communications and port facilities) to radar stations, airfields and shipping lanes.

The weather routines have been carefully integrated into the game system and such occurrences as storm fronts, ground fog and moonlight are certain to frustrate the would-be mission controller.

Each air commander is blessed (or cursed) with a comprehensive doctrine which may restrict his target selection, limit his escort allocation and/or determine the combat actions of his air formations. Sometimes it's not just the enemy which must be overcome, but also your own higher command.

The depth and detail of this carefully researched simulation is made possible solely through the machine code programming skills of Roger Keating and his unique talent for squeezing out the last ounce of R.A.M. The game features superb hi-res graphics and a very user friendly order structure.

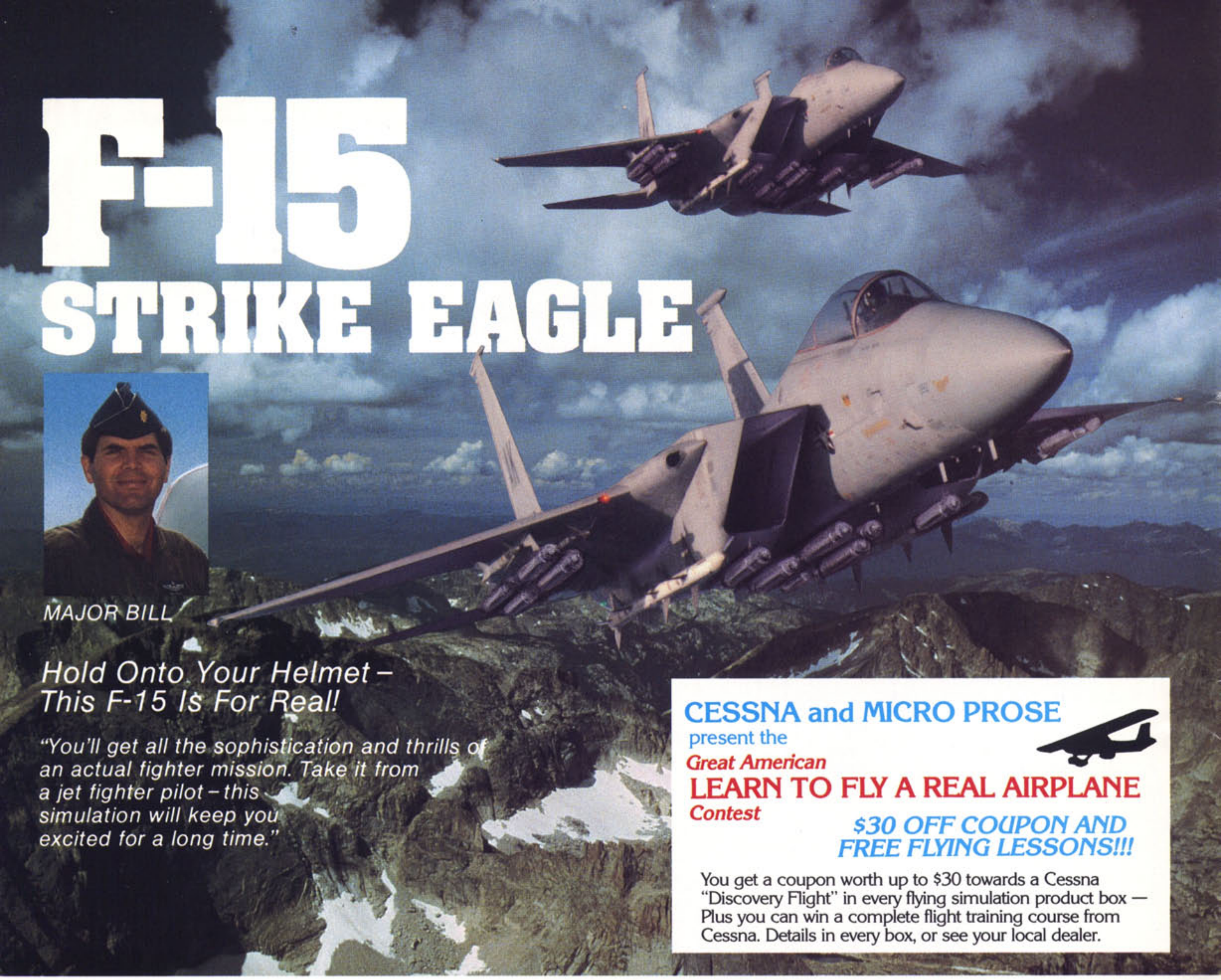
And furthermore... we have provided the creative gamer and historian with a complete ***game design kit.***

This exceptional tool will allow you to create your own scenario variants as well as designing original campaigns. To explain their use, the design routines are illustrated with an entirely new scenario recreating the operations of the US 15th Air Force from Italy in May 1944.

AVAILABLE JULY 1985 FOR THE **APPLE II FAMILY (64K)**
AND AUGUST 1985 FOR THE **COMMODORE 64.**

Only $50.00 at all good software and game retailers or direct from Strategic Studies Group, 336 Pitt St, Sydney. 2000. Australia. (02) 264-7560. Customers in the United States can send their cheque or money order to: SSG (US), 1747 Orleans Ct, Walnut Creek. CA. 94598.

Circle Reader Service #3



F-15 STRIKE EAGLE

MAJOR BILL

Hold Onto Your Helmet – This F-15 Is For Real!

"You'll get all the sophistication and thrills of an actual fighter mission. Take it from a jet fighter pilot – this simulation will keep you excited for a long time."

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F-15 COMPARISON

Feature	"Real" F-15	F-15 STRIKE EAGLE	Imitation Game
1. Multiple Weapon Systems			
• Cannon	Yes	Yes	Yes
• MK-82 Bombs	Yes	Yes	No
• Air-Air Missles	Yes	Yes	No
2. Sophisticated Electronics			
• Heads Up Display	Yes	Yes	No
• Radar	Yes	Yes	No
• Electronic Counter Measures	Yes	Yes	No
• Inertial Navigation	Yes	Yes	No
3. Real Combat Missions	Yes	Yes	No
4. Developed and Tested by Real Fighter Pilots	Yes	Yes	No
5. Aerobatic Flying (Loops, Splits, and YoYos)	Yes	Yes	No

F-15 Strike Eagle is available for Commodore 64/128, Apple II and Atari XL/XE computers for a suggested retail of only $34.95. Also for Macintosh and IBM PC/PC Jr., for a suggested retail of $39.95. Call or write for more information or MC/VISA orders.

GREAT REVIEWS!

ANTIC – F-15 STRIKE EAGLE
Launch into the most exciting aerial combat since Star Raiders with the F-15 Strike Eagle... F-15 is an engrossing game which challenges pilots of all skill levels..." — Charles Jackson

USA TODAY – F-15 STRIKE EAGLE
"... this is more than the right stuff. Once you've gotten used to flying these banks it will be hard to go back to just cruising from LaGuardia to Logan. F-15 is definitely the only way to fly." — Marc Randolph

ANALOG – F-15 STRIKE EAGLE
"...Don't wait. RUN down to you local software merchant and buy a copy of F-15 Strike Eagle today. Tomorrow may be too late!" — Patrick J. Kelley

RUN – F-15 STRIKE EAGLE
"...The F-15 Strike Eagle is not an arcade game, but, rather, one of the most realistic combat flight simulators I've ever seen. If you're looking for a chance to experience some high adventure and danger in a realistic and challenging format, F-15 Strike Eagle is for you." — Peter Paplaskas





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120 Lakefront Drive Hunt Valley, Maryland 21030 301-667-1151

Circle Reader Service #4



Do You Know Us?

If you're into board wargaming, you probably do. For 10 years we've been number one in historical accuracy and innovative design. Our games have won every award from the Charles Roberts to the Games 100. We know history and game design better than anyone else in the business.

But Do We Know Computers?

You bet we do. Take a look at *Chickamauga*: it uses the Atari's capabilities to their fullest, from player-missile graphics to joystick. Of course, it's written entirely in machine language.

Chickamauga: The Battle

In September of 1863, the Confederate Army of Tennessee, secretly reinforced from Virginia by Longstreet's Corps, reversed its retreat to attack the pursuing Union army near Chickamauga Creek. The battle that followed was one of the hardest fought and most evenly matched of the Civil War.

Chickamauga: The Game

You command a Union or Confederate army of 50,000 men: brigades of infantry or cavalry with attached artillery. The computer keeps track of each man and gun, along with changing unit morale, fatigue, and communication status. You can give your army orders (8 different types) with surprising ease, with keyboard or joystick. Orders include march and cautious moves, fire, melee, rest, fortify, etc. Both sides' movement and combat are shown simultaneously on a strategic display.



A section of the battle map. The player is ready to move Law's Brigade of Hood's Division, Longstreet's Corps (the white X).

- ★Unprecedented research and historical detail.
- ★Amazing ease of play.
- ★Tactical and strategic maps.
- ★Computer plays either side at three skill levels.
- ★Save game and play by mail options.
- ★Simultaneous hidden movement—limited intelligence.
- ★Alternate scenario starts on the battle's 2nd day.

$35 disk for Atari computers with at least 48K and one disk drive. If there is no store in your area, you can order direct from GDW. Add $1 per game for handling.

GDW **Game Designers' Workshop**
P.O. Box 1646
Bloomington, Illinois 61702-1646

Circle Reader Service #5

[This isn't just hype. We really do have the money.]

WANTED:

WORLD'S GREATEST ADVENTURES.

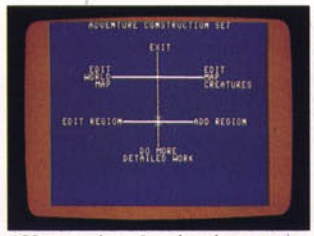
REWARD: $1000 *and* FAME. CALL (800) 227-6703.



ACS is your tool kit. More than 7000 parts to build from. Power to spare!



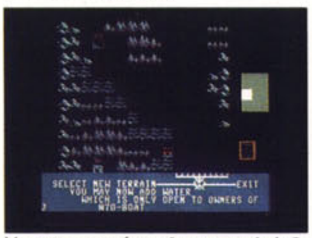
Or make your own parts from scratch. Draw 'em. Give 'em properties. Go for it!



ACS is menu driven. It works with a positive "stick shift" controller. Easy as pie!



Ready-made segments of sci-fi, mystery & dragon-type adventures included. A real bargain!



Mountains, oceans, forests & etc. are pre-built. Or make your own landscapes. You're the boss!



Amazing fact #1: ACS makes adventures (& finishes parts of yours) by itself. This is No Lie!



Music modules & sound effects included. Score your adventures like movies. Be a maestro!



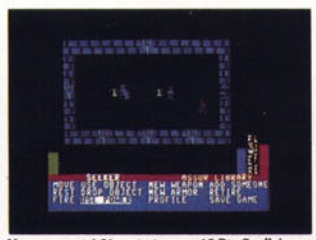
No arms control here! Endless weapons of your design. (Endless armor & cures, fortunately.)



Complete, top-notch epic adventure included: *Rivers of Light* by Stuart Smith, author of *Ali Baba!*



500 obnoxious creatures thrown in! Or make your own. Point 'em at the population! See their priorities!



You get magic! 31 variations on 15 Big Spells! You get technology. You get religion. All right!



Amazing fact #2: ACS integrates text and graphics. All other products wimp out in this regard.



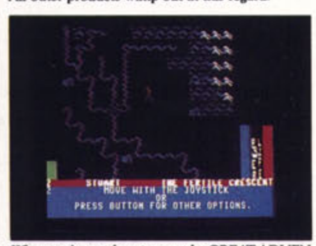
Characters? How many you want? Make 'em. Break 'em. Cast them into the world without a dime!



7 tutorial mini-adventures included! Generously survivable for those tentative first timers!



Design up to 15 different regions with 16 different rooms in each one. Space out!



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HOW TO WIN: Send your adventure entries to Electronic Arts by 12/30/85. 3 winners will be selected by our judges. Their decision: final. Your adventure becomes "public domain" which means you can still get famous even if you don't get rich. **HOW TO ORDER:** Visit your retailer or call 800-227-6703 for direct VISA or MasterCard orders **(in CA call 800-632-7979)**. To buy by mail, send check or money order to Electronic Arts, P.O. Box 306, Half Moon Bay, CA 94019. Add $3 to cover insured shipping and handling. Indicate desired machine version. Allow 1-4 weeks for delivery. *All EA products purchased direct have a 14 day "satisfaction or your money back" guarantee.* **PRICE & MACHINE AVAILABILITY:** C-64 $39.95. Apple IIe/c $49.95. Coming soon to IBM PC/PCjr $49.95. To receive our complete product catalog and direct order form, send 50¢ and a self-addressed, stamped envelope to Electronic Arts, Catalogue Offer, 2755 Campus Drive, San Mateo, CA 94403.

Circle Reader Service #6

This n' That

Don't Panic!

Regular readers of CGW will notice that there is a slight date change on this issue. Our previous issue was our June/July issue (5.3). This is our Sept/Oct issue (5.4). No, you did not miss a mysterious August/Sept issue. At the request of our distributors we are taking this action so that each issue of CGW can be on the newstand before the cover date on the issue.

The bottom line is that there will only be five issues this year instead of six. Thus our next issue will be our Nov-Dec issue (5.5). The Jan/Feb '86 issue will be 6.1. Those subscribers whose subscription expires on or after the not-to-be issue 5.6 have had their subscription's expiration number extended one issue.

This date change makes life easier for our retailers and we aim to make life easier for everyone.

CGW Welcomes New Columns

Beginning with this issue CGW will feature a regular column by Chris Crawford. Those of you familiar with Chris' writing know that he is always informative and often flamboyant. In keeping with that spirit, Chris' new column will be called A Crock of Crawford.

We are also adding a Sports column written by the very capable Rick Teverbaugh.

ADVERTISERS

TAKING A PEEK

Access Software Inc
925 East 900 South
Salt Lake City, UT 84105
801-973-0123

BEACH-HEAD II: is a multi-scenario, multi-level game for one or two players. The player can choose either offensive or defensive game-play roles. Good graphics, animation, scrolling playfields, sound effects and some voice synthesis. A practice mode allows players to develop various battle skills. It also has a provision for recording the top ten scores. BH II is a worthy successor to the original BH. Joystick required. C-64.
Circle Reader Service #15

Artworx Software
150 North Main St
Fairport, NY 14450
800-828-6573

STRIP POKER: Based on the standard game of five card draw. Suzi and Melissa are your opponents on the standard "data" disk, optional disks are available (including male opponents). Hi-Res graphics. Mildly amusing program, might be fun at a party. By the way, the program cheats from time to time. Be aware the models are anatomically correct. Joystick. Many computers. $39.95.
Circle Reader Service #16

COMPUBRIDGE: A tutorial for learning to play bridge. Ten chapters of text, eight quiz sections. Computer generates practice hands and evaluates play. Useful mostly for pure novices to the game. Many computers. $24.95.
Circle Reader Service #17

Avalon Hill
4517 Hartford Rd
Baltimore, MD 21214
800-638-9292

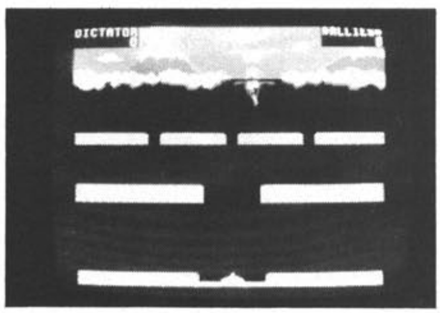
SUPER BOWL SUNDAY: A statistic based hi-res football game for the C-64. Although there are only five basic offensive plays (off tackle, sweep, flat pass, short pass, long pass) you do select ball carrier/receiver. The defense has a large variety of options. Despite the limited offense (e.g., no screens or draws) the game is exciting and does a good job of creating the "feel" of viewing a game on the "tube". Computer can play either or both sides.
Circle Reader Service #18

STATIS PRO BASEBALL: If we had the review copy of this game for our baseball survey it would have ranked quite high. The graphics are minimal and the text is sparse but the technical quality is quite good. Players are rated for many non-stat categories (range factor, catcher's arms, etc) in the same manner as Computer APBA. Stats are compiled and updated. You can create your own teams. If you are in the market for a stat baseball game this one should be considered. We like it better than AH's other baseball entry - PRO MANAGER. Many computers. $35.00.
Circle Reader Service #19

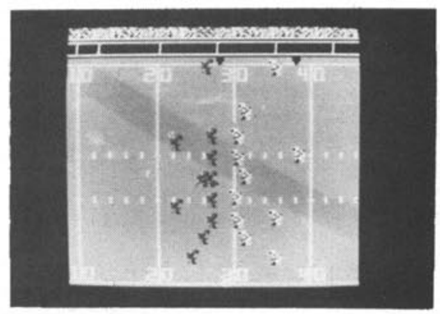
COMPUTER CIRCUS MAXIMUS: An adaptation of AH's board game of the same name. Design your own chariot and then try it out in the Colusseum. Up to 12 players. Five race campaign game with wagering. IBM. $25.00.
Circle Reader Service #20

Ba'rac Limited
PO Box 37206
Shreveport, LA 71133

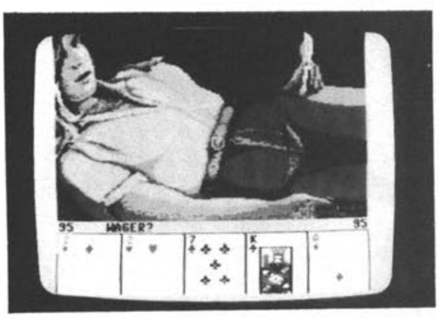
STAR CRYSTAL: A solitaire text adventure series based on the



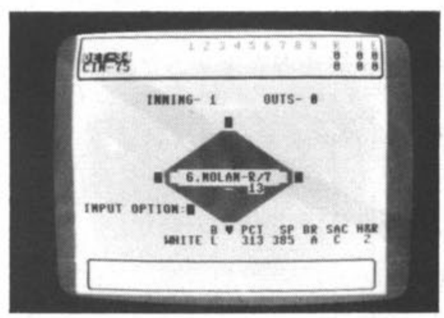
BEACH-HEAD II



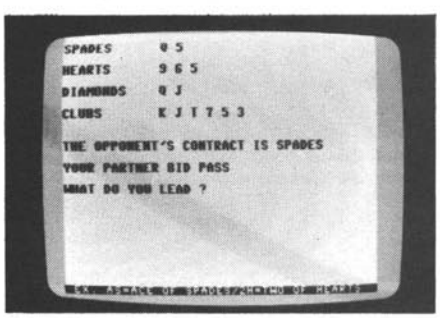
SUPER BOWL SUNDAY



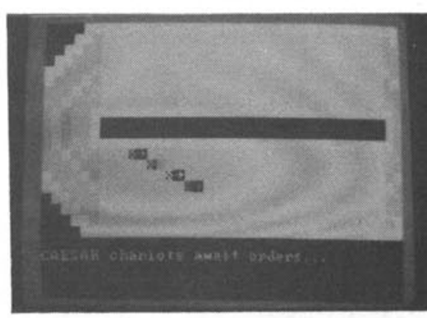
STRIP POKER



STATIS PRO BASEBALL



COMPUBRIDGE



CIRCUS MAXIMUS

TRAVELLER science fiction role-playing game system. Each episode is played separately or in sequence as a solitaire campaign. Five non-player characters, 200 locations, 380 objects, etc. Playing time is quoted at 10 to 50 hours! The nice documentation includes quite a bit of background material regarding the TRAVELLER series. Apple.

Circle Reader Service #21

Broderbund Software
17 Paul Drive
San Rafael, CA 94903
415-479-1170

CAPTAIN GOODNIGHT AND THE ISLANDS OF FEAR: An arcade game with an animated hero, superb graphics and varied scenarios. Captain Goodnight fights aboard tanks, planes, boats, submarines and ski lifts to defeat the evil Dr. Maybe and his Doomsday Machine. Joystick required. Apple $34.95. Circle #22

Berserker Works Ltd
PO Box 14268
Albuquerque, NM 87191
505-298-3237 Circle #23

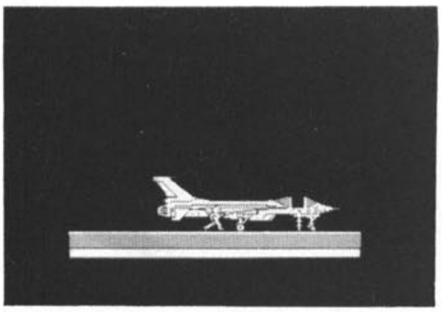
WIZARD WAR: An interactive fantasy war game by the creators of Berserker Raids. You are the character Prince Shan who must defeat the evil forces led by the computer. The game is an interesting variation in that it is a true war game with fantasy themes. You have standard war game items such as range factors and target selection, along with various magic spells. IBM. $34.95.

PRIDE AND PREJUDICE: We get hundreds of games a year into our offices but this one is unique. You are a young woman of the Regency Period. Your goal is to marry the best possible match and avoid spinsterhood. One to six players with each player having varied attributes - beauty, wit, grace, etc. You attend parties, spread gossip and keep an eye out for a wealthy bachelor. Many computers. $34.95.

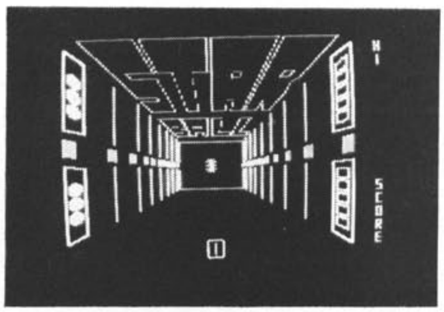
STARBALL: A 3-D game of racquetball. Multilevel, real-time action for one or two players in a fully simulated four-wall court. Apple, C-64. $29.95.

STARCLASH II: A strategic conflict simulation, i.e. a fairly standard space game of exploration, development and warfare. Contains a nice short story by Stephen Walton that sets the stage for the game. IBM. $29.95.

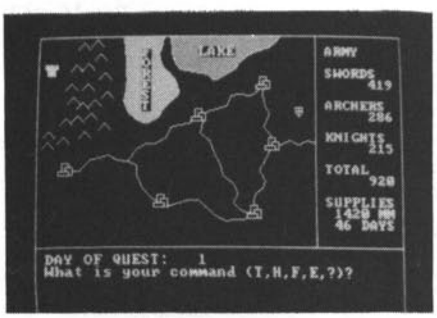
FORCE 400: A game combining elements of chess and checkers. The result is a fairly interesting game of strategy. For one or two players. IBM and TRS-80. $34.95.



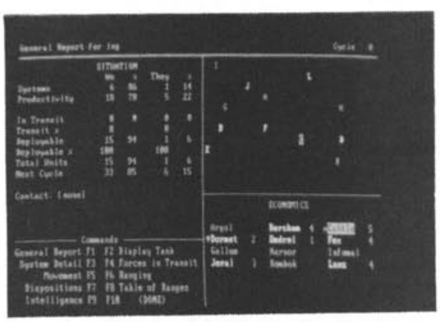
CAPTAIN GOODNIGHT



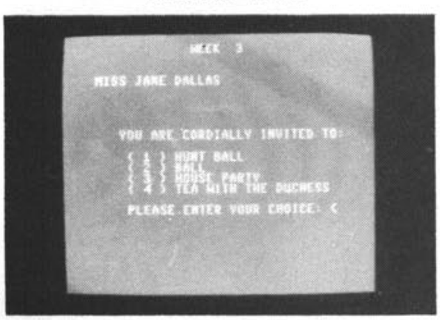
STARBALL



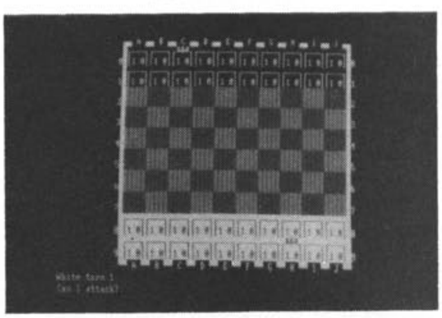
WIZARD WAR



STARCLASH II



PRIDE & PREJUDICE



FORCE 400

Big Ben Games, Ltd.
1765 Maple Street
Northfield, IL 60093
312-446-610

ATARI SMASH HITS #1: Big Ben is the importer for a large number of English games. This entry is a collection of arcade items. Jet Boot Jack, Firefleet, Dan Strikes Back, Captain Sticky's Gold and Hyperblast. Atari. $16.95. Circle #24

CBS Software
One Fawcett Place
Greenwich, CT 06836
203-622-2525

DR. SEUSS - FIX-UP THE MIX-UP PUZZLER: A delightful puzzle game for the young (ages 4 and up). Pieces of Dr. Seuss characters, such as the Cat in the Hat, the Grinch and the Star-Bellied Sneetch, are mixed together in a puzzle. The child must unscramble the puzzle, at which point the characters become animated. Emphasis on problem solving, pattern recognition and memory skills. Many computers. $29.95. Optional use with Muppet Learning Keys. Circle #25

Cygnus
PO Box 57825
Webster, TX 77598
713-486-4163

STAR FLEET I: The first in a series of complex space strategy games. It also contains a role playing concept as you start out as a rookie cadet in the fleet and attempt to progress to admiral. Extensive use of color and sound. The 98 page manual should be the tipoff that this is not a Star Trek type game. A lot of complex decision-making is required for success. The documentation is easily among the best we have ever seen for a game program, it rivals an IBM hardware manual. Can only be described as "state-of-the-art" for space games. IBM. $49.95. Circle #26

Davidson & Associates
6069 Groveoak Place #12
Rancho Palos Verdes, CA 90274
213-373-0971 Circle #27

MATH BLASTER!: Eye-catching graphics, animation, bright colors and sound effects to hold a child's interest in learning math. Actually an arcade game that incorporates four different math learning activities. Includes an editor so that parents or teachers can add more problems. 1st through 6th grades. Apple, IBM & C-64. $49.95.

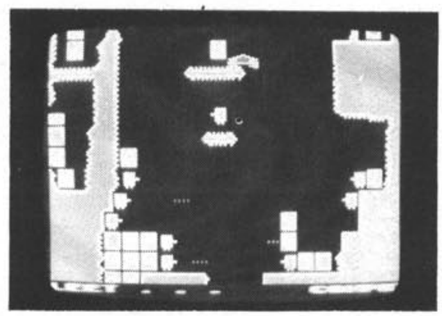
SPELL IT!: All the Davidson products utilize graphics, animation and sound effects to encourage a child's interaction with the learning process. Spelling is a real challenge (interest-wise) but this program has succeeded in bringing life to a dull subject. The arcade game seems well designed for the intended age group (10 years and up). Also has an editor to add your own words. Apple, IBM & C-64. $49.95.

Digital Kamp Group
1737 Walnut Grove
Decatur, IL 62526

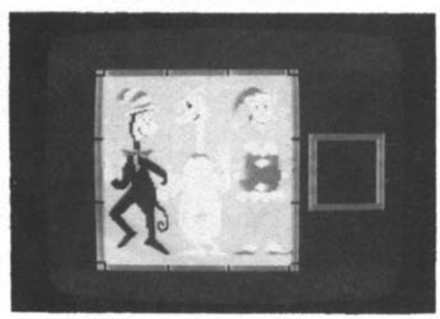
CLASH OF WILLS: The scope of this game is nothing less than the war in Europe 1940-45. Includes production, strategic air, weather, sea movement (including amphibious assaults), movement and combat. The computer will play the Western Allies, the Soviets or both. The hardcopy map is a minus in that it is difficult to interpret terrain features and objectives. However, battles within the game are resolved on a Strategic Overview Map. Documentation is minimal but adequate. Atari. $39.95. Circle #28

Electric Transit/Electronic Arts
2755 Campus Drive
San Mateo, CA 94403
415-571-7171

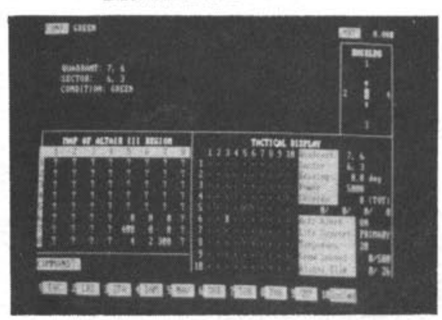
WILDERNESS: A simulation of a survival trek through the Sierra Nevada mountain range. Three-dimensional graphics, has correct environmental details and survival tools, plus realistic human responses to the conditions. Your plane has crashed



ATARI SMASH HITS



DR. SEUSS PUZZLER



STAR FLEET I

in the wilderness. You must use the few remaining supplies and equipment (including a topographical map) to help you survive and reach a distant ranger station. You will face rough terrain, harsh weather and wild animals. The underlying programming is sophisticated, this is a simulation - not a game, although it can be enjoyed on that level. The documentation includes an excellent survival guide that would be adequate to take on a real-life wilderness hike. A new and interesting simulation topic that comes off quite well. Apple. Circle #29

Infocom
125 Cambridge Park Dr
Cambridge, MA 02140

WISHBRINGER: Another addition to the Infocom line of interactive fiction games. In Wishbringer you're a postal clerk in a small village called Festeron. Your once-quiet town becomes the focal point for a titanic struggle between Good and Evil. You must find the magic stone known as Wishbringer and use its powers to make your town safe again. Package includes excellent (and beautiful) documentation, postal map and "magic" stone. Many computers. Rated introductory level by Infocom. Circle #30

Prism Software
26600 Southfield Rd
Lathrup Village, MI 48076
313-559-5067

SITUATION CRITICAL: A three phase arcade game. First is a mission to find and assemble parts of a bomb, requiring good reflexes and mapping skills. Phase two is a cave battle. Three is a bombing run over the Plains of Xarlon (nice graphics on this phase). Apple, Atari & IBM. $29.95. Circle #31

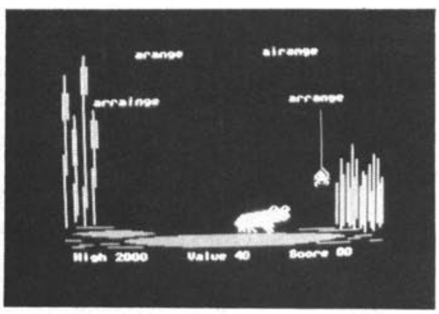
Radarsoft
c/o ACK Inc.
655 John Muir Dr. #E411
San Francisco, CA 94132
415-239-5357

MAPS U.S.A.: Gives the player a helicopter race in search of states, cities and waterways spread out below in smooth-scrolling graphics. An educational program that teaches political geography and topology. Designed for ages nine and up. Radarsoft is the best-selling software company in the Netherlands. Also available are Maps Europe and Maps World. C-64. Circle #32

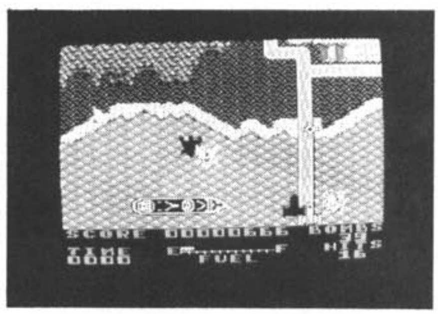
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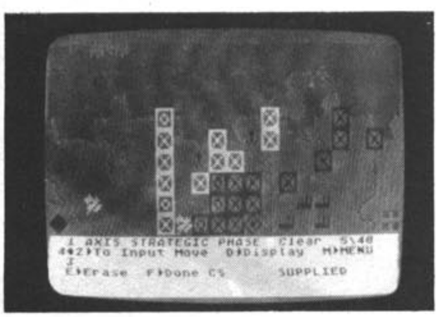
WIZZARDZ & WAR LORDZ: Adventure role-playing fantasy. 15 level dungeon where you search for hidden treasure and battle the assorted fiends. Eight classes, six races and over 1,000 pieces of equipment to arm yourself with. 3-D graphics and real-time action. IBM 128K. $49.95. Circle #33

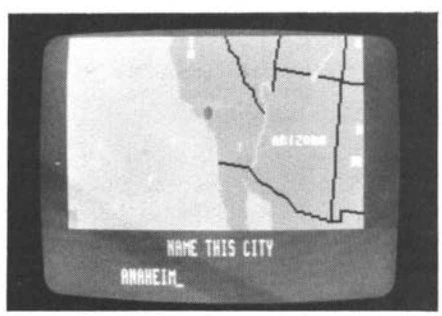
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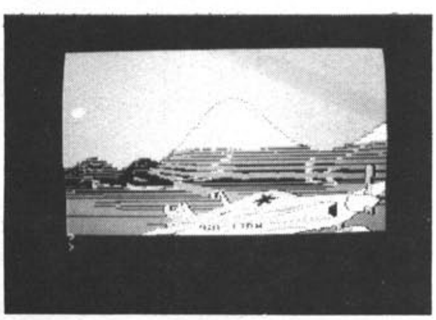
SPELL IT

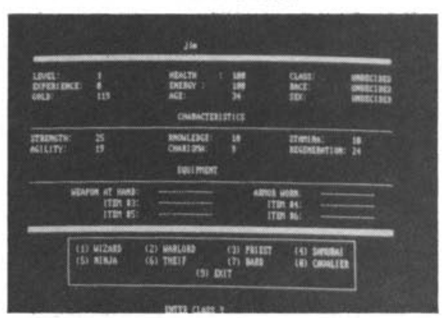

SITUATION CRITICAL


CLASH OF WILLS

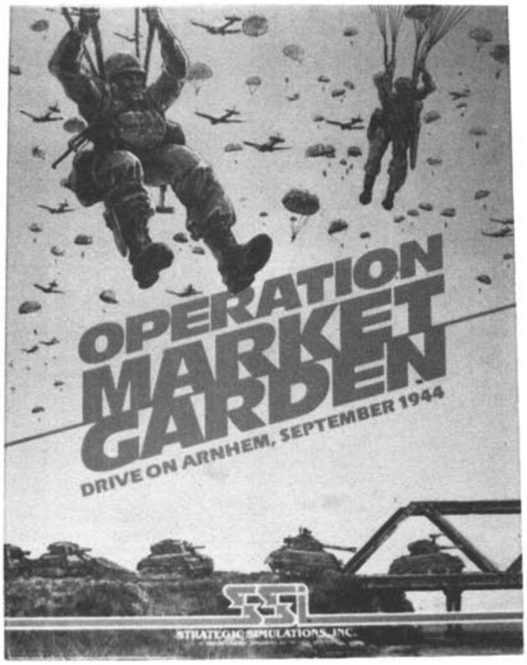


MAPS U.S.A.


WILDERNESS


WIZZARDZ & WAR LORDZ

OPERATION MARKET GARDEN



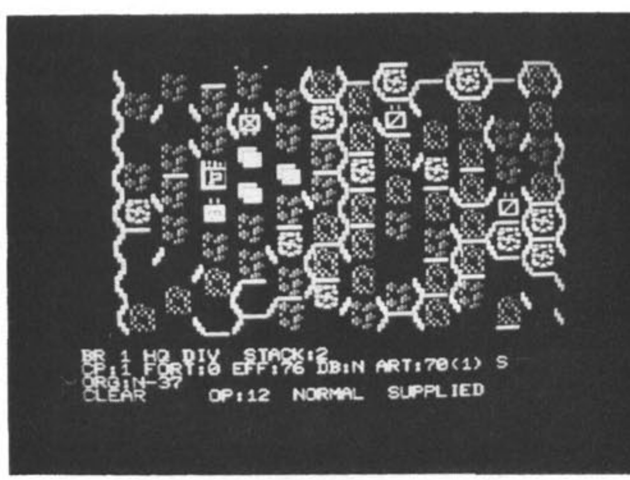
by Bob Proctor

Name:	Operation Market-Garden
Type:	Wargame
System:	Apple II, Atari, C-64
Author:	Chuck Kroegel & David Landrey
Price:	$49.95
Publisher:	Strategic Simulations Inc. Mountain View, CA

This latest SSI game of WW II on the western front takes its theme from the Allies attempt to capture the industrial Ruhr district of Germany in late 1944. It involved seizing bridges across the many waterways of Holland, with paratroops, and sending an armor spearhead rolling north as fast as possible to secure the corridor. Then, hopefully,they could break eastward into Germany, north of the Rhine river. It was a daring gamble that failed at the last crossing, thus giving the title "A Bridge Too Far" to a book and a movie on the subject.

Operation Market-Garden is played on a map showing Holland from the Belgian border north to the town of Arnhem on the Rhine. It is SSI's standard 31 by 32 hex grid scaled to about 2 miles per hex. Terrain types are clear, forest, rough and town. Major rivers are distinguished from smaller streams and canals. And, of course, there's the all important road net along which the Allies must channel their attack in order to keep on their timetable.

There are also many bridges, most of which can be destroyed. The German player has no control over this; there is roughly a 30% chance (it varies with the difficulty setting) that a bridge will be blown by the German garrison when the first Allied unit attempts to cross. In reality, they were ALL destructible, but the three major rivers in the north have but one bridge across them. It would make the game too much of a crap-shoot if they could be blown after the Allies had struggled north for five or six days. They will usually be well-defended anyway. Blown bridges can be repaired by Allied Engineers.



The game is 10 turns long and the sequence of play is very simple. Each turn is one day and begins with the mundane activities of determining weather, allocating air strikes, checking supply and placing reinforcements on their entry hexes. Once these chores are out of the way, the fun begins. The day is broken into 4 phases. First, the Allies move and attack, then the Germans, then the Allies again and finally the Germans again. Since everything costs operation points, many units may use them all up in the first phase of the day and have nothing left for the second phase. A typical Operations Phase will have the player issuing orders to every friendly unit on the map. Movement and mode changes (from normal to travel or vice-versa) are executed immediately but combat is deferred until all movement is complete. It is often important to move your units in just the right sequence to keep them from obstructing each other's movement and to have them attack in the right order. This is important because only the first attacker uses full combat strength. Once you make a move, you cannot take it back or change it but you can use up part of a unit's Operation Points, leave it and move one or more other units, and then return and move the first unit some more.

While the basic game is a good one, SSI has provided many options to keep it from getting stale. Not only are there four levels of difficulty, but you can choose to play with Advanced rules (the basic set is considered Intermediate). These extra rules make the Allied player trace supply lines to each unit supplied by air (tedious), prevent either player from knowing the strength of enemy units, allow both to control advances after combat, and introduces Command Control into the game. This last is an operation point penalty imposed on any unit that gets too far from its headquarters unit.

For additional challenge, you can play with hidden units -- the only enemy units you can see are those that are adjacent to your forces. For variety, you can start with units in their historical locations or you can select free set-up and pick new initial drop zones for Allied paratroopers. The starting German positions change too but the German player has no control over them.

The weather can also be either historical or random. Cloudy days restrict the amount of air support and the number of airborne reinforcements for the Allies. Overcast days prevent both. Playing with historical weather means both sides know exactly when the second and third drops will occur. In solitaire play, the computer always plays the Germans. It can be an easy or a tough opponent depending on the level of difficulty selected. Small battles develop around each drop zone, the most desperate being farthest north. The way units are jumbled together without well-defined lines and the uncertainty about where, when, and in what strength the enemy will appear next keep the game interesting for both sides. Even better, an entire game can be concluded in a single evening. I recommend this game to all WW II fans.

WHAT'S WRONG WITH SSI GAMES?



Granted that the good people at SSI brought out the first good historical computer wargame, that the quality of their games has only been challenged recently, and that the breadth of their line of games is unsurpassed. The following list is offered in the spirit that ANYTHING can be improved. While the Emperor is definitely dressed, he's been wearing the same suit long enough that it's beginning to get shiny at the knees and elbows. We need. . .

1. A better player interface. A mouse would be a much better way to move the cursor than the 1 to 6 keys. Even the newer Apple II's can support mice. Menus, help screens, and good messages would make SSI games much easier to play and understand.
2. Maps that look more like maps. Admittedly this will be hard given the current limits on color and resolution, especially in the Apple II.
3. A more intelligent computer opponent; one that can beat us by guile instead of by shaving odds and increasing strength.
4. More variety from the computer opponent. One that might try to wipe out the British 1st Airborne in one game and take and hold Arnhem the next.
5. Better tutorials for learning the game system. On-screen, context sensitive help would be great but requires lots of room on disk and in memory. A tutorial section in the manual would help also.

Bob Proctor

FOG of WAR

A Critique of "Limited Intelligence" in Wargames

by Jay Selover



Fog of war and *limited intelligence* have become two of the most popular catch-phrases of computer wargaming. No, they do not refer (respectively) to fighting in London and the IQ of your commanding officer. They both have a kind of loose definition as those factors in warfare which force command decisions to be made without full knowledge of all pertinent factors in the combat. *Limited Intelligence* is certainly not a new concept; it was recognized as a big potential for computer-moderated games well before there even were any on the market. Considering the potential, it is interesting to see how the treatment of *limited intelligence* in computer wargames has evolved over the years.

When you buy a computer wargame, you can expect one of three possible treatments of the *fog of war* issue. The treatment will be a function of the depth of simulation or design intent, and no one approach is always "right"; it depends on how the design is handled. The first level is to purposely ignore intelligence matters completely. This would be a game in which all units of both sides are open to free inspection, and corresponds closely to most board wargames. Since this approach wastes one of the greatest assets of the computer, it is not surprising that only a few games fall in this category anymore. There were several examples of this approach among the earliest computer wargames when "state of the art" consisted of translating a good board wargame to the computer pretty much word for word. You still find games published with this perspective in cases where limited intelligence is not the focal point of the design.

At the other end of the spectrum from games which ignore or deny limited intelligence are a few which use battlefield intelligence as a focal design point. In these games, accurate portrayal of the frustration and uncertainty of a battlefield command is central in the design. Games in this category may or may not be good on other levels, but they should at least paint an appropriately foggy picture of warfare. Examples include *Napoleon's Campaigns 1813-1815* and *Carrier Force* from SSI, *Grey Seas, Grey Skies* and *Fall Gelb* from Simulations Canada, and *Carriers At War* from SSG.

Finally, bracketed by the two extremes, we find by far the most populous class of wargames. These are games which use limited intelligence as a conscious design feature, but which use more as an added feature where ever it fits more that as a central design point. Actually, it seems that designers want to do a good job, but end up with less than ideal treatments because of programming constraints. It does not take a West Point graduate to recognize some of the obviously unrealistic representations on the market, so what else could it be but an inability to find programming solutions? The obvious case in point is *Close Assault* from The Avalon Hill Game Company. This game is no longer "current" but it is such an outstanding example of an off-handed approach to *fog of war* that it begs for a mention. *Close Assault* is loosely a computerized version of the classic boardgame *Squad*

Leader (at least the first three scenarios and one mapboard). The computer game attempts to go one step past the boardgame in "limited intelligence". It does keep enemy squads hidden from view until one of your units actually "sights" them. The problem is that once the units are sighted, they remain on the map for the rest of the game. It does not matter how far away they move or how many buildings are between your units and them, they always remain in clear view!

Obviously, there was a limitation inherent in the programming approach used in *Close Assault* which made it too difficult to rehide exposed squads. And, it is nice to see that perhaps the greatest strides in computer wargaming in the last few years have been in programming capability. Still, there are plenty of recent cases of what appears to be "convenience programming" which gives "limited intelligence" aspects of the design short shrift. Gary Grigsby has put out three very good games with a common system; *Guadalcanal Campaign, Bomb Alley,* and *North Atlantic '86*. All three of these give both players complete and true knowledge as to the damage inflicted on a task force by an airstrike. That simply is not an accurate representation, especially in the World War II games. Not to pick on Gary Grigsby (but let's anyway), he recently came out with *War In Russia*, which is an excellent game. It really is one of my favorites, but... In *War in Russia* one executes strategic movement while one's opponent is away from the screen. It is possible to shuffle the placement of your forces to a large extent from turn to turn without giving a hint of what is happening. If your opponent attacks a hex and badly damages a unit, you could pull it out and replace it with a completely new unit without your opponent having any idea. Can you imagine a German commander reporting that there were still Russians manning the line in front of him, but that he could not tell how many, what kind of artillery support they had, or even what unit or units they were? Also, if two units are in a hex, your opponent cannot even tell what type of unit either is. A favorite ploy for the Russians is to stack an empty air group on the front line to make a hex appear to be strongly held when it really just has one weak infantry unit.

It is interesting to see how the treatment of limited intelligence has evolved over the years

Lest you get the impression that Gary Grigsby or even SSI are my targets here, let's just mention some others. *Carriers At War* is a terrific game and has a generally excellent limited intelligence "feel", but even it slips up on a few points. There are several way to spot an enemy task force; carrier-based search planes, reconnaissance planes, and even coastwatchers. The designer's notes in the game inform us that the reliability of a sighting depends on who makes it (this makes perfect sense). Unfortunately, when you get a sighting report on an enemy task force, you are not told who made the sighting. If the sighting is near land it could have been a reliable coastwatcher or it could have been one of your bleary-eyed carrier pilots reporting six destroyers as six fleet carriers. Also, you get some information about the success of an airstrike on an enemy fleet, but when you launch a strike on an enemy airbase, you learn virtually nothing of the success of the raid. You never get any estimate of how badly the runway is (if at all).

Finally, since I started with The Avalon Hill Game Company, it is only fitting that I finish with one of their recent products. The "Bismarck" scenario in *Dreadnoughts* is a solitaire simulation of the breakout, hunt for, and death of the Bismarck in 1941. It really is excellent in the "fog of war" department. (The two player "Battle" scenario is not considered here -- it is an "all cards on the table" shoot 'em up.) It is really amazing to see the vast improvement in one company's product from *Close Assault* to *Dreadnoughts*. In fact I can find absolutely no complaint with the "limited intelligence" aspect of *Dreadnoughts*! Unless... There is a common problem with computer wargames which is a close cousin of "inappropriate limited intelligence". That is: "incomplete documentation", and *Dreadnoughts* really has incomplete documentation. When you first play this game, I can guarantee that your intelligence picture will be incomplete because you are not briefed on things that the commander of the Bismarck would absolutely have known. You are not given even rudimentary information about the probabilities of success of recon missions or of intercepting an enemy force using a "patrol" course, or the probability of recovering a floatplane in a given weather at a given speed, or any estimate of British radio-direction finding capabilities (just how good are they?). Thus, there is no way to use your intelligence gathering facilities as effectively as would the true captain.

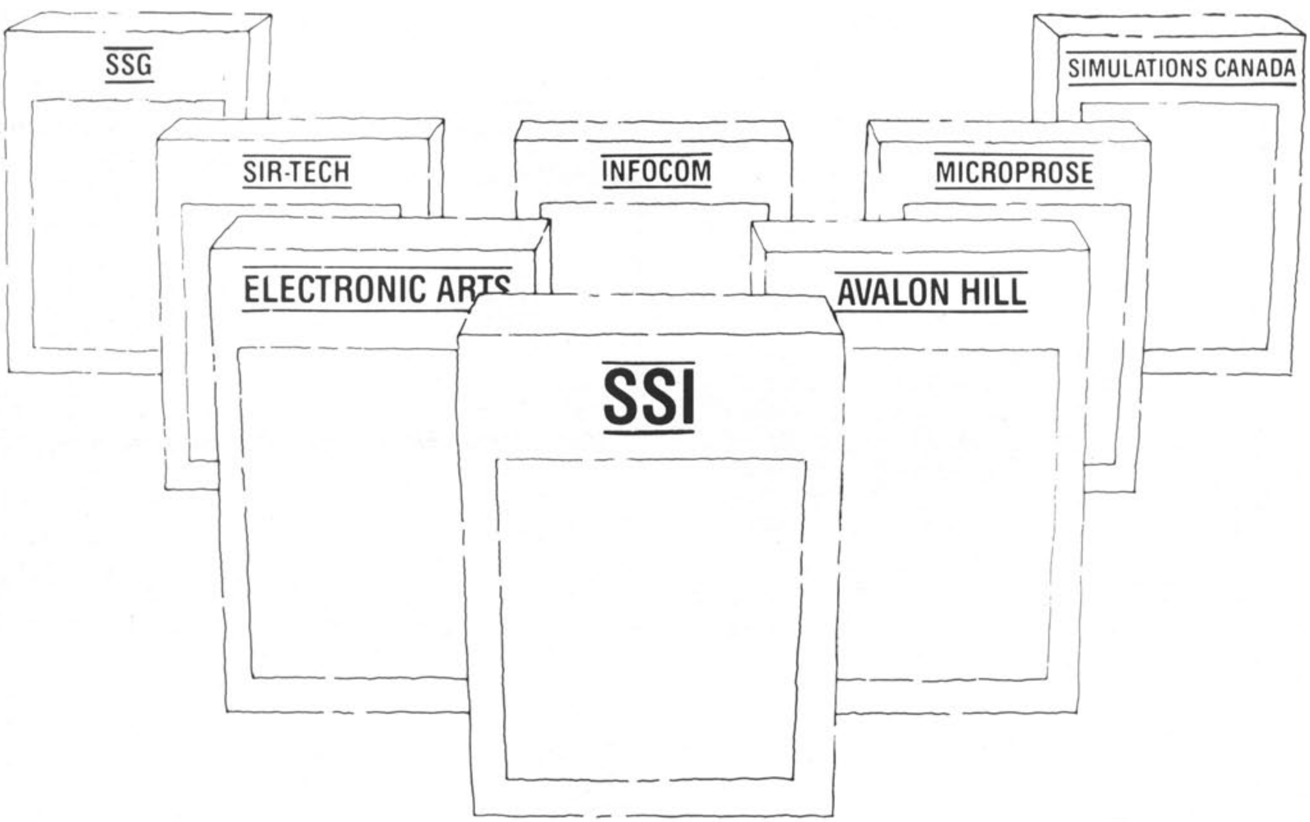
Fogging the war by shortchanging the rules and explanations can be frustrating, but at least in the case of *Dreadnoughts*, an excellent system waits to be discovered beyond that. In too many other cases, faulty or incomplete rules are just a thin veil over an unrealistic "limited intelligence" treatment. However, it is time for me to retract my fangs and begin to soften my tone. Of course, I can pick and choose my shots in an article like this; and you can find fault with *any* game if you look hard enough. And, of course, the handling of "limited intelligence" has become more and more realistic over the last four years in particular. The main thing for designers and programmers to bear in mind is that "convenience programming" is noticed as at least a blemish on the final product, and that we do understand and appreciate historical and appropriate "limited intelligence" in our computer wargames.

Vote for the Game of the Year -- Page 41

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COMPUTER GAMES 1985

A Report from Summer CES



by Rick Teverbaugh

As a regular visitor at the June Consumer Electronics Show in Chicago, I have seen widespread changes among the software manufacturers over the past three years. Just two years ago, there were a lot of flashing neon signs, scantily clad females and unrealistic goals about what you - the computer gamer - wanted.

This year I'm glad to pass along that most of the companies were much more serious about their games. Here are some of the more impressive products I saw.

Lode Runner's Rescue: Broderbund (from recently acquired subsidy Synapse). Yet a third program of this popular theme, it keeps the create-your-own-screen format while adding a three dimensional aspect.

Captain Goodnight And The Islands of Fear: Broderbund. Get set to save the world (again), but this time you'll need expertise in the driver's seat of helicopters, airplanes, tanks, trucks and a submarine.

The Fourth Protocol: Bantam. Help British intelligence officer John Preston as he races the clock to uncover and foil a plot to smuggle and detonate a nuclear device in England in this graphic adventure.

Sherlock Holmes in Another Bow: Bantam. The computer acts as Dr. Watson and in your persona as the great detective you'll try to unravel six mysteriously intertwined cases.

Jet Combat Simulator: Epyx. Four separate options enable you to go from landing practice to combat in the air. There is fully computerized instrumentation, but don't expect this to be a snap.

Winter Games: Epyx. Done in the same spirit as Summer Games I & II, there are six cold weather sports offered; ski jumping, ski biathlon, hot dogging, speed and freestyle events and a bobsled race.

The World's Greatest Football Game: Epyx. Easily the most exciting sports release at CES. The play book can hold up to 120 plays and allows you to design your own. You can also view the game from a bird's eye view (long range or close-up) over the stadium or you can view from the coach's perspective on the sideline.

The Edilon and Koronis Rift: Epyx. Two new offerings from Lucasfilm Games. The former explores a magic world and the latter a space environment. The games have a two-thirds arcade, one-third strategy mix.

Fast Tracks: Activision. Three modes to create some of the most interesting slot car races you ever dreamed of. First you create the tracks with an unbelievably easy system, then you can view it and make any necessary changes and finally you can race. You can save the track and your best time on disk and then send it to a friend for him to test, even if he doesn't own the original program.

Hacker: Activision. If you're fascinated by all the places your computer can go, but not willing to actually take it to the brim of illegality, this game gives you a chance to experience some of that excitement without any of the danger.

Acrojet: Microprose. Not just another flight simulation program, this time there's a Decathlon of Sport Aviation included. The events are a fun way to make yourself a better pilot while keeping the enjoyment level high.

Gunship: Microprose. For those who were fascinated by the maneuverability of the helicopter in Blue Thunder, this is your chance to be equipped with just such a machine and take it on one of seven different missions.

Silent Service: Microprose. World War II submarine combat in the Pacific at its graphic best. There is a wide range of historical scenarios with graduated skill levels.

Fix It: Random House. Easily the most difficult game shown at CES to describe. You are given a configuration of stuff that resembles, more than anything, the stuff you keep meaning to get rid of from that old spare bedroom closet. You must put all the items in the proper location to make a smooth-running machine. There are 200 screens from which to work.

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ROE R. ADAMS III

Computer adventure games are the hottest thing in Japan since sushi. On a recent trip to Japan, I attended the NEC show in Tokyo. It is the equivalent of one of our, alas, defunct Applefests. In Japan, NEC accounts for the bulk of the Japanese micro sales, and software for the NEC machines dominates the market.

At the show every booth featured adventure games. There were a few text adventures, but most of them were spectacular super hi-res graphic adventure games. The NEC machines have much better hi-res resolution than any of our regular machines. The colors seemed to jump right out of the screen. The Japanese are even more hooked on great visuals than we are.

American devotees of Japanese animation films will not be surprised to learn that many of the computer adventure games are based on these hot movies. Several games have evolved from the blockbuster **Starblazer** series, which has been running in serial form on some US television stations for the past five years. **Dagger of Kamui** was previewed. This program is to be released this summer, simultaneously with the top-notch animated movie of the same name. Rumors of a **Lensman** adventure game abound. The animation movie, based on the famous E.E. Doc Smith book, has become the equivalent Japanese hit of our **Star Wars**.

One aspect of Japanese graphic adventure games that will come as quite a shock for most Americans is that many of the stories contain nudity. This is not porno software, like **Custard's Last Stand**, but casual nudity and sex. There really never is any emphasis on either, both are just there within the storyline.

As much as the Japanese enjoy hi-res graphic adventures (Roberta Williams's **Time Zone** is still high on the charts after three years!), the pinnacle of their admiration is reserved for the fantasy role-playing games. Both **Wizardry** and **Ultima** have huge followings in Japan. The computer magazines cover Lord British (Ultima) like our National Inquirer would cover a television star. When Robert Woodhead, of Wizardry fame, was recently in Japan he was practically mobbed by autograph seekers. Just introducing himself in a computer store would start a near stampede as people would run outside shout that he was inside!

The top-selling Japanese designed fantasy role-playing game is **Black Onyx**, designed by Henk Rogers. Two of Japan's premier magazines, *ASCII* and *LOGIN*, recently acknowledged Mr. Rogers as having the best selling adventure game of 1984. The latest release from Mr. Roger's company, Bullet Proof Software (B.P.S.), is **Demon's Ring**. It promises to be a hit sequel to **Black Onyx**. In our country, Sierra is currently planning for a fall release of an American version of Black Onyx for the Apple and C-64. It is an excellent game with animated combat sequences and visual spells. Another Rogers' game, **Asteka**, offers breathtaking hi-res graphics of Mexican ruins and beautiful models.

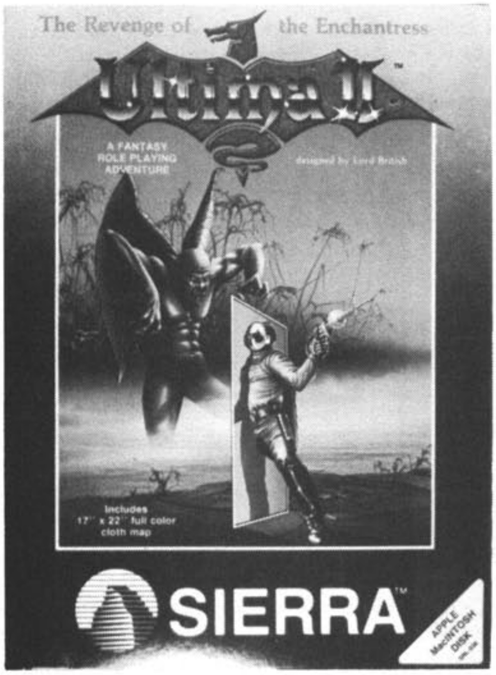
Arcade games are not as dead in Japan as they are in the United States. The biggest success story over there, however, is an American product, Broderbund's **Lode Runner**. Doug Carlston, President of Broderbund, has stated that sales of Lode Runner in Japan equaled the 1983 sales in the US, when the game was the number one selling US game of the year. Lode Runner also has the distinction of being the first American game ever turned into a Japanese coin-op arcade game. It went right to the top of the coin-op charts!

Another Japanese phenomenon surfaced at the NEC show: Lode Runner contests. There were hundreds of students competing for the top scores on the computerized version of Lode Runner. Twenty computers were arranged in a numbered horseshoe. Each round consisted of ten minutes. Three uniformed directors, looking just like American gameshow hosts, stood in the center hyping the game and shouting encouragement to the players. Lights above each computer station would signal the winners of each round. At the end, there was to be a playoff between all the winners to determine the top player. The show was being filmed for Japanese television. There is even a large Lode Runner fan club, complete with a monthly magazine, t-shirts and buttons.

The real status of MSX in Japan proved to be one of the big surprises of the trip. All we have heard in the United States for the past year is how Microsoft's MSX had become the Japanese standard operating system and how a unified Japanese market is going to sweep into this country. The truth of the matter is that NEC refused to join the collaboration. According to several sources, NEC hardware and software accounts for 80% of the Japanese marketplace. So, the actual effect of the projected MSX impact can be seen as most likely inconsequential.

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Ultima II: The Macintosh Version



by Patricia Fitzgibbons

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NAME:       Ultima II
TYPE:       Role-Playing Adventure
SYSTEM:     Many
FORMAT:     Disk
#PLAYERS:   1
AUTHOR:     Lord British (Richard Garriott)
PRICE:      $59.95
PUBLISHER:  Sierra On-Line, Inc.
            Coarsegold, CA
```

Macintosh owners need not be envious any longer of Apple, Atari, C-64, and IBM PC/PC jr. users: Sierra On-line has ported ULTIMA II to the Mac. Second of the best-selling games in Lord British's acclaimed series, ULTIMA II ("The Revenge of the Enchantress") is the baroque sequel to the classic fantasy role-playing adventure. An epic game of character development, continent hopping, and time travel, ULTIMA II will stimulate and satisfy RPG and adventure fans alike.

The player's primary task in ULTIMA II is to develop a powerful character through a seemingly endless succession of hack and slash encounters. However, to win the game, the player must also unlock the mysteries of the Time Doors and solve the secrets of Minax, a wicked female sorceress.

ULTIMA II's exceptional documentation includes a colorful cloth map and a well written twenty-page handbook. The small manual contains plenty of helpful clues as well as an entertaining tale about the quest: "...It has been hypothesized that a single traveler, strong and well equipped with the right charms, could travel the time corridors to ultimately defeat Minax, thereby reversing the destruction she has wrought."

After "cloning" a player disk from the ULTIMA II master disk, an individualized character is created by allocating ninety points among six attributes: strength, agility, stamina, charisma, wisdom, and intelligence. Choices of race, profession, and sex affect these attributes (e.g., a male character receives five extra strength points; an elf, five more agility points; a cleric is given ten additional points of wisdom). The distribution of attribute points is vital to a particular character's success or failure. High agility, for example, helps a character to steal and wield certain weapons, whereas high charisma results in lower prices for supplies and equipment. A male elf thief is a good -- though not necessarily the best -- beginning character. A wide variety of characters is possible, and part of ULTIMA II's appeal is that it may be replayed many times with different types of characters (such as a female dwarf wizard, a male human cleric, and so on.)

The world of Ultima is graphically depicted as a populated landscape in the map window portion of the screen. A lone character must quickly locate the nearest town where a weapon and a suit of armor may be purchased or stolen (tip: head west, then south). By roaming land, sea, and air, and slaying all manner of strange creatures, a character's attributes and possessions increase dramatically. Dungeons and towers are unimportant, and may be safely ignored (no great loss since movement inside these places is tedious). However, interplanetary exploration and time travel are indispensable aspects of the quest, and involve danger as well as opportunity. Luckily, a nice "resurrection" feature is available.

ULTIMA II is a tough, time-consuming game, and some players may not have enough patience to kill all the monsters and collect all the gold that is needed in order to buy upscale weapons and additional hit points. Those who do stick it out will be rewarded with a virtually invincible character who can easily (perhaps too easily!) destroy Minax.

The Mac version of ULTIMA II is a joy to play. The mouse is used almost exclusively, and is a real bonus in combat (the character can move and fight along the diagonal). The menus are easy to use, and

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Atari Playfield

David Stone

REPORT FROM THE HARD SIDE

I would like to congratulate Jack Tramiel, Atari Corp's owner and chief executive, on making the late spring delivery of the new 32-bit, ST512 Atari computers to retailers throughout the United States, just as he announced back in January. I would like to -- but I can't. Once again, Mr. Tramiel has announced, and missed, a product shipment date.

If you were hoping to play the ST version of "M.U.L.E." any time soon, you can put down that joystick. The new date for the shipment of the ST machines is now late summer. You guess which year.

A couple of facts underscore the probability that Atari will not be releasing the new machines within the next few months. One is that Tramiel is still up in the air about which ad agency to use to introduce the new products. One source reports that Atari has recently dropped its long-time, California based ad agency and is now courting the New York agency that formerly had the Commodore account. Without an agency, let alone an advertising campaign, it is highly unlikely that any new product is going to be released soon. [Ed. Note: Less than 24 hours before this issue went to press, Atari announced that they had hired a new ad agency and that they would be spending an incredible ten million dollars on advertising before Christmas.]

Another tell-tale sign that no product shipment is imminent is that there have been no announcements of any new distribution agreements between Atari Corp and any major department stores. One theory for this is that Tramiel is having second thoughts about the viability of relying on the computer-illiterate salespeople found in most department stores to sell sophisticated computers and peripherals.

"Atari watching" can be more fun than the soaps, but in the long run the false starts and product delays have got to be bad for Atari's credibility. However, Tramiel, as former head of Commodore, has an incredible track record. So, nobody, even the most skeptical, can count Tramiel out until he counts himself out.

Meanwhile, amidst spurts and lurches of a faltering Atari Corp, new games for the Atari only trickle in. And, the trickle is likely to stay a trickle until Atari shapes up and ships out (new product, that is).

REPORT FROM THE SOFT SIDE

Two of the more interesting games for the Atari that have recently trickled into CGW headquarters are Six Gun Shoot Out and Gemstone Warrior, both from SSI. Six Gun is complex enough to entertain a war gamer, and simple enough that it can be played and enjoyed without paying strict attention to all the numbers and formulas that affect the action. But I want to spend what "time" I have left in commenting on Gemstone.

Gemstone Warrior (GW) is a "conversion" game formerly available only on the Commodore and Apple. Its humble beginnings, however, do not detract from its playability. Overall, I found GW challenging and just different enough not to duplicate the action of other games in my rather large collection of action and adventure games.

The title "Gemstone Warrior" may be a somewhat misleading. "Warrior" implies that your objective is to fight. Not so -- although a lot of fighting goes on. Gemstone Quest would have been closer to the mark since your objective is to retrieve the five segments of the Gemstone from the foe infested depths of the caverns and mazes of the underworld.

The underworld is made up of dozens of colorful scrolling caves and mazes that range in size from about two screens by two screens, to three by five. The scrolling effect is continuous but not particularly smooth. Because of the large number of screens and connecting passage ways, map making is imperative each time you play.

Your choice of weapons is simple: crossbow and arrows or fireballs (like grenades). Since you can only carry a limited number of these weapons, you will find it essential to continually search for rearmaments. The best strategy early in the game is to keep the crossbow ready and save the fireballs for the more wicked foes (i.e., those that usually take three or more arrows to kill).

The inventory items that you find by searching coffins and chests add interest, and some small amount of humor to the game. Some of the items include poisons, elixers, magic freeze wands, invisibility spells, and mysterious ancient objects (that look uncannily like diskettes) that have unknown powers. Since you can have only one of these items ready to use with a single keystroke, it's important to anticipate your needs and have the appropriate object ready.

The foes of GW are well animated and include the standard variety of ghosts, skeletons, squiggly blobs, and birds of prey, plus a variety of other lesser-known, but just-as-feared demons. These foes get harder to kill the deeper you go into the underworld. So, you may find a strategy of "shoot everything that moves" used early in the game soon gets changed to "run first, shoot only if you have to".

A clever design feature allows either keyboard or joystick control for moving, shooting, searching, and adding items to your inventory. However, the keyboard is required for "using" an item (such as drinking a regenerative potion). I found the keyboard controls, especially for diagonal shooting, "too creative" to easily master. And, because the action is "real time", keeping both hands on the joystick at all times, ready to fight or run, is much easier and faster than keyboarding. The only caution here is that if you use the joystick do not forget about your inventory of spells that can be used only via the keyboard.

GW has a save game feature which in the instruction booklet sounds like normal save game. However, a word of warning about this particular "save game"is in order. It is more like a "pause to disk" feature than a save game that might be found in most adventure games. What this means is that even though you can save a current game to disk, if you are killed you cannot retrieve it. After you are killed, you are immediately taken to the "high score" screen to record your name. Subsequent attempts to retrieve your last "save" will not work.

The few drawbacks of GW, such as the necessity of using both joystick and keyboard (or of learning to move and shoot from the keyboard) in a real-time situation and the somewhat unusual save-game feature, are far outweighed by the game's superior combination of action and adventure. Since the top scores are saved to disk, GW is not likely to start collecting dust immediately after the first time you retrieve the five Gemstones.

[Ed. Note: Actually, the "dead is dead" feature of Gemstone Warrior is a refreshing change from the more common practice of either resurrecting the character within the framework of the game or allowing the user to hedge against the grim reaper with the save game routine. We have never liked the flippant way death is handled in most adventure games: "Oh dear, you have died! Well, never fear; death isn't real. You can simply rise from the dead! Resurrection is as common as dirt around here!]"

Amiga: The Dream Machine

by Jon Freeman

Faster than a speeding AT. More colorful than a GTIA Atari. Able to process multiple tasks on a single screen. Yes, it's the Superman of personal computers, Commodore's just announced, much heralded, and long awaited Amiga computer. Sure to be called (without too much hyperbole) the ultimate game machine, the Amiga should establish itself at once as the first choice for game enthusiasts (and just about everyone else).

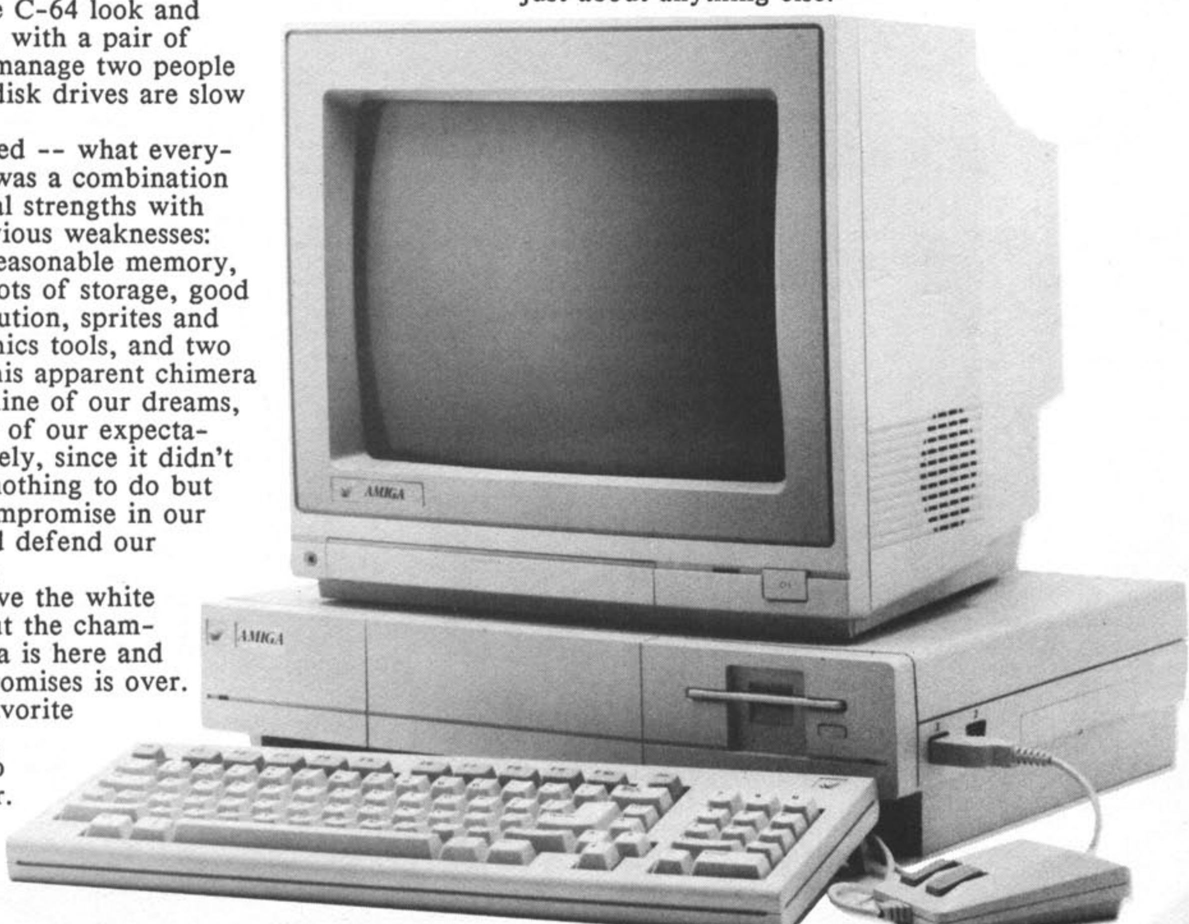
Personal computers to date have been, to put it mildly, less than ideal. Despite their partisans, each of the leading micros has obvious flaws as a game environment. The Apple and the IBM PC suffer from mediocre graphics, lousy sound, expensive joysticks, and no satisfactory provision for two players. The Macintosh has no color -- and no answer to the two-player problem, either. The Atari 800 and the C-64 look and sound better and, with a pair of cheap joysticks, manage two people easily, but their disk drives are slow and miserly.

What we wanted -- what everybody wanted -- was a combination of their individual strengths with none of their obvious weaknesses: something with reasonable memory, fast drives with lots of storage, good sound, high resolution, sprites and other fancy graphics tools, and two joystick ports. This apparent chimera was not the machine of our dreams, but the computer of our expectations. Unfortunately, since it didn't exist, there was nothing to do but settle for less, compromise in our various ways, and defend our disparate choices.

Well, you can wave the white flag and break out the champagne. The Amiga is here and the war of compromises is over. Anything your favorite computer can do, the Amiga can do better. And faster. And in stereo.

NOT JUST SKIN DEEP

To start with, the Amiga just looks nice: very professional and vaguely like a cross between an Apple //c and an IBM PC. The CPU is cantilevered, allowing the (separate) keyboard to slide in and under it when not in use. The keyboard is respectable, with all the expected keys in all the right places; there are even four cursor keys logically arranged in a compact cross. The main unit has all the connections you could want or imagine: serial and parallel ports; an expansion bus; two joystick ports; TV (RF), composite and analog RGB outputs; left- and right-channel audio jacks for your stereo system. A two-button mouse comes as standard equipment, but you can plug in ordinary (cheap!) Atari/Commodore joysticks, paddles, or just about anything else.



What's inside the box, of course, is far more important than the exterior, however attractive. Volumes could be written simply about Intuition, Amiga's new operating system superstructure and user interface. Let me simply note in passing that it learned a lot from the Mac; that it is everything VisiOn, Windows, Topview, and GEM ever wanted to be (and more); and that it gives the user push-button control over everything from the colors of the standard display to the size and priority of each window.

THE HEART OF A NEW MACHINE

The heart of the Amiga is a faster (7.1 MHz) version of the same chip that powers the Mac (and, for that matter, the Sun, AT&T's new Unix PC, and the often promised but little seen Atari ST machines): the Motorola 68000, a 16/32-bit hybrid. For comparison, think of the 8-bit 6502 as a 4-cylinder engine, the IBM PC's 8088 as a six, and the AT's 80286 as an eight. In those terms, on that scale, the 68000 is nothing less than a V-12.

"ANYTHING YOUR FAVORITE COMPUTER CAN DO, THE AMIGA CAN DO BETTER. AND FASTER. AND IN STEREO"

But that's not all. As Mac owners and developers have discovered, it's possible to overload even a V-12. You can get reasonable sound out of the Macintosh, but if you do, all other operations slow to a grinding halt. To avoid this problem, the Amiga, like the Atari 800 and the C-64 before it, uses a pair of specialized support chips: one for graphics and one for sound and (most) I/O. Since multi-channel music or sound effects, fast animation, and even disk I/O can be done without much (or any) of the 68000's time or energy, the main processor is free to devote its attention to number-crunching and data-processing: counting casualties, calculating strategies, weighing alternatives. (In fact, between the coprocessors and the Operating System's multitasking capabilities, it would literally be possible to play a game and do a spreadsheet on the same computer at the same time.)

Nor is the Amiga cramped for space. One-hundred-ninety-two kilobytes of ROM and 256K of RAM are standard. A single plug-in cartridge doubles the RAM to 512K, and if you want still more, external expansion of many megabytes (all directly addressable) is possible. A single 3.5" drive (using the same hard-shelled disks as the Mac) is built in, but you can add other 3.5", 5.25", or hard disk drives. One standard Amiga disk will hold a whopping 880K.

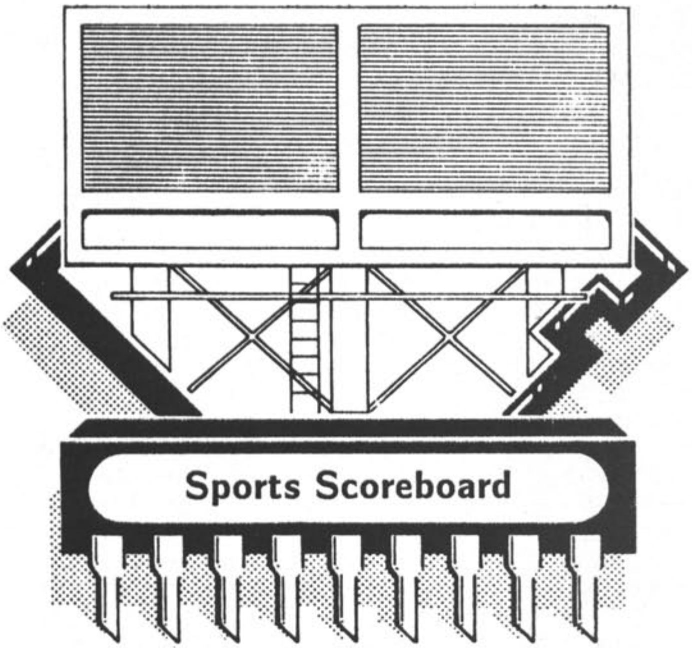
...AND SOUL

The machine's sound and graphics capabilities exceed the wildest rumors you may have heard. Because the display is organized in bit-planes, you get as much -- or as little -- color and resolution as you want, without paying the memory overhead for more than you need. All display modes draw from a palette of 4096 true colors; unlike the IBM PC, for instance, the colors displayed are the same whether you're viewing a TV, composite video, or RGB output. Standard "low-res" is 320 x 200 in up to 32 colors. (This is twice the standard resolution of the Atari 800 or C-64, more than twice the Apple's -- and with far more colors.) "Hi-res" goes all the way up to 640 x 400 (interlaced) -- still with up to 16 colors. Standard text display is nominally 60- or 80-columns, user-selectable.

Those are just the basics. Of special interest to gamers is the Amiga's dual-playfield mode. One playfield, for instance, might represent a cockpit of any size and shape, with appropriate dials, switches, and displays. Underneath, showing through any transparent areas in the first playfield, could be a view of the landscape outside the craft. Objects, action, and colors (up to 8 in the bottom playfield, 7 in the top) in the two playfields are completely independent: the landscape could scroll past without disturbing the cockpit display in the least.

Naturally, there are sprites (what were called "players" in Atari 800 lingo), those magical gizmos that make possible high-speed, flicker-free animation. (All the icons and missiles in the Atari and C-64 versions of ARCHON are players/sprites.) Compared to those in the old Ataris, there are twice as many (8), with twice the resolution (16 Amiga low-res pixels), and twice the color (i.e., three colors plus transparent). The difference in detail this makes cannot be imagined: in the new Amiga version of ARCHON, for instance, not only

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Rick Teverbaugh

There is plenty of variety to offer this time around in the computer sports world. In fact, variety is what best describes the lead item at which we're going to look.

When Epyx first released **Summer Games**, there was much oohing and aahing over the graphics and the challenge of the sports involved. Even if there were some groans that the two swimming events were too much alike, there was a little something for everyone - a little hand-eye coordination, a little strategy and a little stamina.

Now there is **Summer Games II**, released first for the Commodore 64, but with the promise of an Apple version soon. There are eight new events to master and several more reasons to get excited about the program.

First, the graphics are even better. The first place the improvement is noticeable is in the triple jump. When the athlete completes a good jump, the crowd cheers, he waves back to them and on the big board at the top of the stadium a replay of his jump is shown. But when the athlete faults, he puts his head down and slowly walks from the pit.

The second reason to cheer Summer Games II is the variety of the challenges.

But before we go into that, let's make a quick rundown of the eight events included. There's the aforementioned triple jump, followed by rowing, javelin, equestrian, high jump, fencing, cycling and kayaking.

Physically, the gamer must perform a variety of chores merely to survive. In the triple jump, two well-timed thrusts to the right of the joystick must be followed by one to the left and another forward. In the equestrian event you must pump the joystick forward to gain speed, push it to the right to make the horse jump and again to the left to secure a safe landing.

Fencing is the most entertaining, especially if more than one is competing. In probably what is the most realistic event yet portrayed in this series, you have the choice of attacking all out, thrusting with a return to a defensive posture or playing the parry game to wait your best opportunity.

Cycling and kayaking, the final two events, are the most unique. To win at cycling you must rotate the joystick clockwise and in the proper rhythm to gain the top speed. Both the rowing and cycling feature a split screen so you can compete against an opponent as well as against the best time.

Kayaking is my personal favorite. As the current pushes you down through the course, different colored markers tell not only which path must be taken, but also the manner in which the trip must be completed. Some markers need only to be passed through in a normal face-first manner. Others need to be backed through, while a third type needs to be passed through against the current. When that event is finished, you get a rundown on how you did at each gate, your overall time, plus any time penalties for not following course specifications.

Yet, I think what I like most about Summer Games II is the fact that you can use it in conjunction with Summer Games I to make a 16-event challenge. Point totals are saved for the entire 16 events and world records are also saved to disk. By the time I tire at all from Summer Games II, Epyx has promised Winter Games.

Those of you with baseball or auto racing on the brain, there are two new programs aimed directly at you. One hits the mark at least partially and the other will leave you wondering exactly what went wrong.

For baseball enthusiasts there is **Dave Winfield's Batter Up** by Avant-Garde. The program has two sides. One is a tutorial to help you become a better hitter. I doubt that there are too many tips that you wouldn't already get from a Little League or Babe Ruth coach here, but there is a well-written companion text that addresses hitting in more detail.

The highlight of the package is a program called Slugfest, where up to nine hitters can compete against a pitcher in a sort of batting practice-type scenario.

There are eight different pitchers you can select to hit against and at four different levels (sandlot, semi-pro, minors and majors). There are even four ballparks included, so what's a homer at Wrigley Field could be a noisy out in the Death Valley of left-center field at Yankee Stadium.

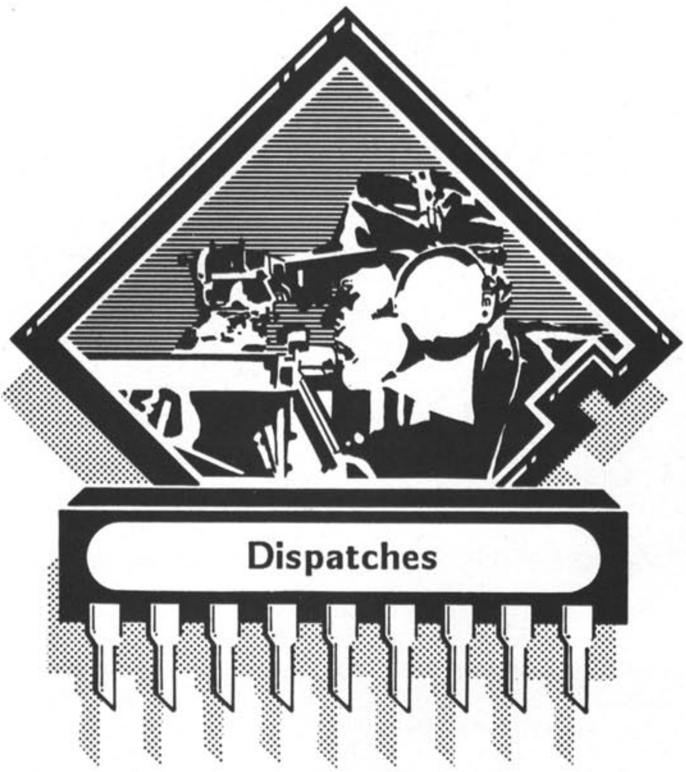
The program will keep track of what each hitter has done. If you get too good against one of the eight pitchers you have selected, the computer will bring in a reliever. The pitchers included are patterned after Nolan Ryan, Steve Carlton, Bob Gibson, Fernando Valenzuela, Randy Jones, Catfish Hunter, Jack Morris and Phil Niekro.

You must decide when and if to swing and whether to take a high cut, a medium swipe or a low rip. An overhead view of the stadium will then show you where the ball went and tell you the result.

The only problem with the program is the vantage point of the gamer. Instead of seeing the ball as the hitter would, you sit off at a 45-degree angle to see both the hitter and the pitcher. It makes it fairly easy to see whether a pitch is high or low, but not whether it is inside or outside.

Batter Up is available for the Apple II series.

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FRIENDLY GAMES

Dan Bunten

Computer games should be friendly to their players! After all, it's the players who shelled out their hard earned cash to be entertained. They're entitled to a little special attention from the game's designer. Most of us would not tolerate a word processor that wasn't "user friendly", so why do we put up with games that are virtually "user hostile"? It shouldn't be necessary to read a massive manual and constantly refer to a "quick reference card". Games should be easy to play.

On the other hand, games need to be challenging. No one enjoys a game that they win no matter what they do. Players thrive on competition. A game needs obstacles. Obstacles make winning an accomplishment. Thus, game designers give a lot of attention to blocking the "easy win". The player is supposed to have to work for his achievement.

So how do we resolve this paradox? Should games be easy on the player or hard on the player? They should be both. Playing should be simple. Winning should be difficult. Unfortunately, more than a few game designers have confused these two concepts.

In some cases it seems that the designer just made it easy on himself by allowing the difficulty of play to become part of the obstacle to winning. This is a simpler job by far. As a designer I know that if I can make it hard for you to discover how to play I am also making it hard for you to win my game. I feel strongly that this is "cheating" on the design. It seems to me that some designers who claim to be creating challenging games are really making games that are hard to play. To a certain extent, I feel most text adventure games fall into this category. The contention by purists that discovering the words that make the game respond is part of the "challenge" is so much hot air. The challenge such games create becomes *HOW to talk* rather than *WHAT to say*! Not all games that are hard to play are the result of bad design. In some cases the designer just seems to have gotten carried away with obstructing winning to the point where playing is also difficult. This may not be bad depending on the audience. (Some players seem to enjoy solving the most obscure puzzles. There's no accounting for taste!). Nevertheless, any game could be improved by moving the difficulty from the *how to play* category to the *how to win* one.

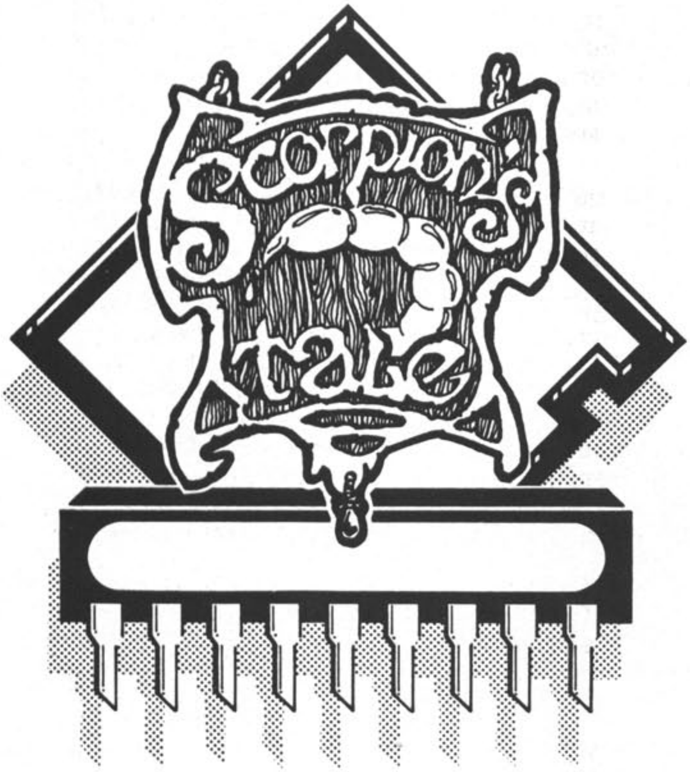
Games need to be "player friendly". Any game would be better off if more time were devoted to making it easier to play. Business, professional and home management software designers have invested considerable effort in making their products more "user friendly". You can look at the progress made in word processors to get an idea of the impact of more "friendly" designs.

Back in the dark ages, the early '80s and before, it was not unusual for word processors to offer whole keyboards full of features. Every control character would evoke a different function. In 1979 I wrote a word processor that boasted thirty commands. We thought it was a great idea to offer as many options to users as we could. However, to use those programs, you needed a memory like an elephant, or a third hand to hold the reference manual. Since that time, word processors have gotten progressively better as they became easier to use. Although the current word processors have far fewer features, they seem much more powerful. This shows the potential of "user friendliness" in software design. Game designers can use the same "tricks".

Paul Heckel, a software consultant, wrote a book entitled The Elements of Friendly Software Design (1984, Warner Books). In this book Heckel covers everything from "the seven traps that snag experienced designers" to "the thirty principles of friendly software design". One of Heckel's basic premises is that software design is a communication craft rather than a technical skill.

Therefore, he draws quite a few of his examples from other communication crafts such as advertising, film making and writing. This book is a must

Continued on pg. 35



Phantasie

As told by Scorpia

WARNING! Scorpion's Tale contains hints on solving computer adventure games. If you do not want help, do not read on.

Hmmmm, you're looking a little pale today. It must have been all that messing around in other people's minds. No matter, just pull your chair up to the fire, and I'll have Fred pour out something refreshing for you. Actually, what you really need is a vacation from all that heavy cerebral stuff. In fact, a little physical exercise, some good, old-fashioned, hack-and-slash, is definitely in order. Not in real life, of course! Only in Phantasie.

So, you're off to vanquish the evil sorcerer, Nikademus, and bring peace to the troubled land of Gelnor. Your first move should be to read the docs, very carefully. Read them several times, so you know what you can do, and what you have available to you in the game.

The party you create is crucial to success. Take your time, and make sure that each character is as strong and dexterous as possible. Remember, there are no penalties for class, so any character of any profession can wear any armor or use any weapon, provided the character has the necessary attributes.

This will take awhile, but it's worth the effort. I had very good results (winning the game) with a party composed of one fighter, one ranger, one cleric, one thief, and two wizards. However, other combinations are certainly possible, so experiment a little until you find what's right for you.

Now, there is one thing I'm going to tell you straight out about the game, and if you'd rather not know it, don't read any further; just skip on down to the next paragraph. Ok, there is one dungeon on Gelnor that you won't be able to enter, unless you have a Minotaur as a member of the party. This is the dungeon presided over by the Minotaur God. Therefore, at least one of your fighters should be a Minotaur, right from the start, because that is a very tough dungeon to get through!

Equipping the party is pretty easy. The towns only sell basic items; the really good stuff is mostly in the dungeons. Buy the best you can (which won't be much), a few healing potions, if you can afford them, and you're ready (I hope!) for your excursion into the outside world.

The world map is made up of 16 squares, arranged 4x4. The first square is "filled in" and you can see all the features around you. However, the remaining 15 squares will be dark when you first enter them, and only by moving around can you see what's there. Fortunately, once you've moved over a spot, it becomes a permanent part of the map.

Make sure you go over each and every spot wherever possible, or you will miss some very important things in the game, such as towns and dungeons, among others. This includes doing a little swimming from time to time. That ability isn't just there for show; you're going to be needing it.

Naturally, as you ramble around, you'll be coming across all sorts of nasty monsters. Sometimes, they will just be too powerful to fight, especially for a beginning party. Once in awhile, you can simply greet them, and nothing will happen. However, that doesn't always work, in which case, combat is initiated.

Running works occasionally, but you'll probably take a few hits before you can get away. Bribery is better; 90% of the time, monsters will take a bribe and leave you in peace. This is especially true of night encounters, when most of the group will be asleep. At such times, it's better to fork over the gold rather than take a chance on getting wiped out. Of course, the monsters might not accept the bribe, in which case, you're going to have some problems.

Fighting is fairly simple; you merely choose an action for each character in the party, and hope for the best. You do a lot of hoping, as the monsters often come in multiple ranks, while your group is all in one rank, spread neatly across the bottom of the screen. Wizards and thieves are thus most important in these encounters, as a thief can hit at any rank, and wizards have spells that can effect more than one monster. Read up on those spells carefully; the offensive ones are usually preferable to the defensive ones. And remember: if you run out of spells, your wizards still have weapons, which they can use in combat when necessary.

You'll be spending a lot of time in the dungeons. Actually, "dungeons" is just a term of convenience; most of them aren't dungeons as one usually thinks of them: castles, a city, temples, caves, etc. Each one is unique, and all of them are extremely important. Take your time in each one, map it thoroughly (ie, go over every possible space), and

remember that they all have secret doors, traps, and other tricks to them. Move carefully, and get out if you're taking a beating. The program will save what you've done so far, if you want it to, and you can come back later to do more.

There is something to be found in every dungeon; a word or phrase you find in one may be critical in another. Make note of everything you see and hear in them. Always pick up weapons and armor that you find, whether lying around or after encounters. If you can't use it, you can always sell it. Keep in mind that some doors are locked, but the key can be found somewhere else in the same dungeon (of course, it might not be EASY to find or get hold of!).

Along the way, you will come across numerous scrolls. Some of these you can buy in towns, others will be found in dungeons. Each of them contains clues and information you'll need to finish the game. Make note of which scrolls you've found, and what they say (since they're numbered, this is not hard).

Then you can sell them (every gold piece helps!).

By now, you're probably wondering, what about the rings? Well, eight of them will be found in the dungeons, and they won't be easy to obtain. The ninth ring can be purchased for gold in a certain town, which is not easy to get to. If you haven't found that one yet, remember that the towns are also numbered from 1-11. That should help you to determine where to go; all you have to do now is figure out how to get there (maybe you should check your list of spells).

Then there are the four runes of Air, Fire, Earth, and Water. You'll need those to complete the game, too. They can all be found in the dungeons, but a couple of them will not be easy to come by. In fact, I listed them in a certain order; I'll leave it to you to figure out why.

So, you've got the rings, you've got the runes, and now the Oracle tells you it's "time to visit the Gods". Where are they? In Olympus, of course.

Getting there is easy, if you know where to go. Check out Lord Wood's castle VERY carefully (watch out for the sliding floors!), and you should have no problem in reaching the astral plane.

When you arrive, you'll find things are a bit different there. For instance, it's rather empty. Most of the dark spots will remain dark as you walk over them. Also, Olympus is a bit larger than you might think, so you'll have to do a lot of walking. Patience! You'll find the Gods eventually.

When you do, you'll have to pass certain tests, but you're equipped for that now, so you should just breeze through the dungeon, and meet up with Zeus himself. He'll give you a little gift, and then it's time for the final act of this little drama.

Once back in Gelnor, it's off to see the wizard. You may have found his castle before this; if so, you also found you weren't able to get in before.

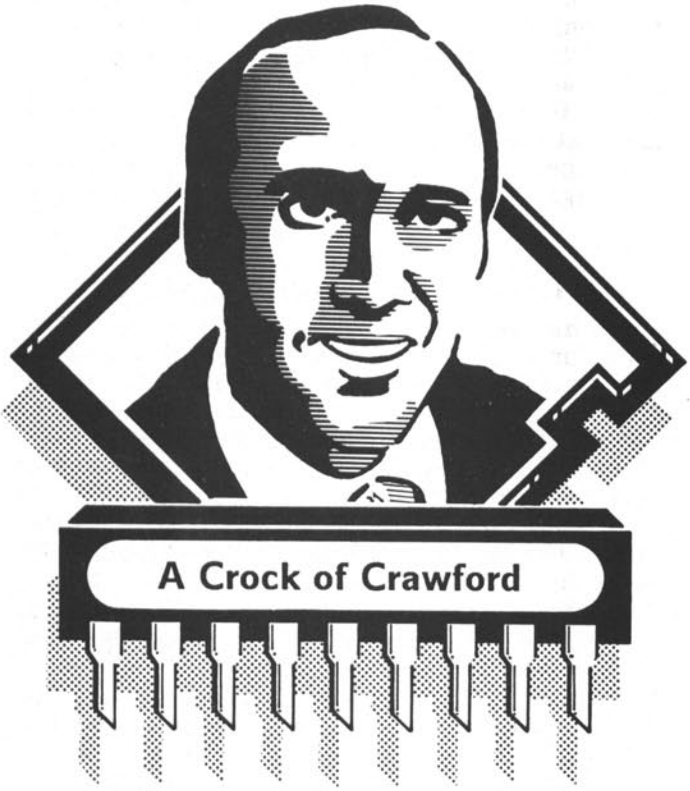
Don't worry (or, maybe you should!), this time, you'll get in. If you haven't found it yet, you haven't done enough swimming.

In any case, Nikademus' place is going to be rather tough to get through, so come prepared with your best weapons, armor, and plenty of healing and magic potions. Black Knights are all over the place here, and you'll have to fight them at every turn. You'll also have to find your way to the throne room, which is not easy. As with every other dungeon, it's important to go over every possible space.

Eventually, you'll find what you're looking for. When that happens, your party should be at their max hit points and magic points. Nikademus is the single toughest monster in the game, and it will take magic to defeat him; ordinary weapons will hardly even get in a shot on him. So, just pour it on, and keep at it; he's hard to defeat, but it CAN be done! One final word: after you've polished him off, you'll find that the game doesn't exactly "end"; you can go around the countryside killing off more monsters. I had a chat with SSI about that, and they told me they MAY bring out a sequel to Phantasie... so don't let your characters get too old!

Well, I guess that's it for this issue's Tale. As always, if you need help with a game (or three), you can send your questions to me (along with a self-addressed, stamped envelope, if you live in the United States) at the following address:

Scorpia
P.O. Box 338
Gracie Station
New York, NY 10028
See you next time, and happy adventuring!



PROCESS INTENSITY VERSUS DATA INTENSITY

Chris Crawford

One of the concepts that I frequently use in designing games is the concept of *process intensity*. Process intensity is definitely one of the more esoteric concepts in game design, and certainly one of the least understood. I have seen many games, some of them done by experienced and proven designers, that fail to properly utilize process intensity.

Process intensity is the opposite of data intensity. They sit on opposite sides of a spectrum. Data intensity sits on the side of facts. In the middle lie events. On the opposite side are processes. Facts are, events happen and processes interact. Data intensity concerns itself with the way things are. It emphasizes long compilations of textual, graphic or numeric data. Process intensity concerns not the way things are but the way that they change. Process intensity does not address the simple fact that things change, but rather the whys and wherefores of that change, the causes and relationships that lead to change.

Process intensity is important to game designers because it is essential to interactiveness. Facts are dead; you can't interact with a fact. You can't even interact with a fixed event. If you are going to have an interaction, then you and your opponent must both be able to effect change. A game must therefore have rules for defining how change is effected. These rules (processes) are the heart and soul of the game. Its other features (titles, graphics, etc.) are mere accoutrements.

This is not to say that data has no place in a game. Every game requires a certain amount of data. Process and data are analogous to differential equation and boundary condition. A differential equation specifies how one quantity changes in proportion to other quantities. A differential equation never tells what the value actually is; it only tells how it changes. Thus, a differential equation in isolation has no direct predictive value; only when we provide the data of the boundary conditions can we use the differential equation to calculate useful information. In a similar way does a game with rules but no data lack any useful context. Who cares for the rules of purchasing a hotel in Monopoly if there is no place to put it, and no money with which to buy it? What good is a combat results table in a wargame if there are no places to fight?

Data is thus the raw material to be manipulated by the processes of the game. It is the fuel for the rules, the fodder for the processes. It is a vital element, but not the central element. The processes of the game are the central element.

A process intensive game offers more choices, and the choices are richer

Process intensity manifests itself in many ways. A process intensive game offers the player many choices, and the choices are of a richer and more subtle nature. The process intensive game has many, many branches and many endstates. Internally, the process intensive game carries out many computations and sports a large number of branches. It has much code and few tables of data.

The data intensive game is also easy to spot. It offers the player very few choices, and those few are seldom very interesting. The data intensive game has few outcomes other than the simple declaration of victory or defeat. It uses large amounts of data in its program, with a puny program picking over the masses of data like a fly buzzing over a pile of fruit. The data intensive game does very little with its data other than to select which pile of data it wants, and then ship it to the player without further processing. The data intensive game has much to show and very little to do. It may have lots of pretty pictures or impressive music, but the player can't do anything with them.

Stories are data intensive and have no process intensity at all. They present a great many facts and events, but the reader or viewer has no option to interact with the story. Nevertheless, stories are concerned more with the processes of human experience than with the simple facts presented. The audience of a story must infer the processes from the events of the story.

Continued on pg. 33



Strategically Speaking covers strategy game tips, including tips on wargames, sports games, economic and other "real life" simulations, and classic style games.

DISCLAIMER: The tips printed in SS are those of the authors. We try to avoid printing tips that don't work, but we cannot playtest all, or even most of them. So, let the player beware.

Beginning with this issue we play $5.00 for each Strategically Speaking tip used. Presently the bulk of tips submitted to CGW are on wargames. We also need tips on other types of strategy games as well. Tips can be mailed to Strategically Speaking c/o Computer Gaming World, P.O. Box 4566, Anaheim, CA 92803-4566. Try to keep tips under 250 words if possible.

REFORGER '88

Warsaw Pact player: In the opening turn of the "Surprise" scenario the WP player can inflict far-reaching disruption of NATO strategy by inventive deployment of his air forces.

Taking advantage of the guaranteed absence of NATO interceptors, the WP player should direct his airstrikes against West German bridges deep behind NATO lines. By eliminating the road bridges adjacent to <1,20>, <2,20>, <1,29> and <12,23>, a total of six attacks, the WP player will prevent the resupply of forward NATO units between Fulda-Aschaffenburg-Wurburg for several turns until engineer battalions have arrived to correct the situation. These engineers will be hampered in two ways; their movement will be impeded by refugees and subsequent airstrikes will disrupt their bridge reconstruction efforts.

The drop in supply (to front-line units) can be exploited by strong, repetitive and coordinated attacks. Frequently this results in the early capture of Wurzburg, securing the southern shoulder and permitting a redirection of force towards Rhein-Mein AFB.

Douglas M. Dery
Denver, CO

GUADALCANAL CAMPAIGN

Japanese: The rules state that if the number of Bettys on Rabaul drop below a certain number then there is a chance for reinforcements. The Japanese player only has to transfer most of his Bettys to Truk each time Rabaul gets reinforced, then transfer all back to Rabaul when you have enough. I built a force of over 300 Bettys this way. Did you know that the Japanese player can train Bettys for carrier operations? This could give the American a long-range jolt.

Mike Briggs
Compuserve 76324,2130

OPERATION MARKET GARDEN

The historical set-up for the 82nd Airborne makes for a difficult defense of the unit's supply hex. The Allied player, in the "Free Set-up" option can rectify this problem. The drop site should be positioned in hex <11,10>. Drop one regiment in <12,8> and its subsidiary battalion in <10,9>. Their mission is to eliminate the 10SS Recon unit in <11,8> and secure the Nijmegen bridge. With the Div HQ in <11,10> providing artillery support, the elimination of the recon unit and seizure of the bridge should occur by the end of the second turn.

Taking Nijmegen this early will permit the 82nd to reinforce British efforts in Arnhem. The new HQ position makes for a smaller perimeter defense. This perimeter could incorporate the defensive attributes of the Groesbeek periphery. The 82nd would retain the capacity of flexible defense throughout the Groesbeek, Mook, Grave and Nijmegen quadrilateral.

Doug Dery
Denver, CO

ALL NEW!

39.95

"Mertactor: The Volentine Gambit" is the first episode of the Starcrystal Campaign, a solitaire computer text adventure based on the TRAVELLER® game system. Each episode is playable individually or as a part of the campaign. Characters and objects are transportable from one episode into the next. Each episode features over 300 interactive objects, over 200 locations, up to six non-player characters and a variety of animals. Two-dimensional locations support a combat system which fully represents the performance of ranged weapons operating within a text environment.

The first episode is now available for the Apple IIe and IIc computer systems. IBM PC editions available soon. $39.95 postpaid. Dealer inquires invited.

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CROCK (cont.)

The data intensive game and the process intensive game are like a statuette and a diamond. The statuette derives its beauty from its data --- from the fineness of detail of execution, the colors and shadings of the surface, the texture and contours of the figure. The beauty of the statuette can be appreciated in a single long glance.

The diamond, however, has no beauty of its own. It has no color, and its shape is not a source of great joy. Its beauty arises from its interaction with the light around it. The diamond processes the light (refracts it) and casts an array of sparkles in all directions. Moreover, the beauty of the diamond cannot readily be appreciated in a single glance. The diamond must be moved around, viewed from different angles and interacted with before the eye can comprehend its beauty. Both the statuette and the diamond are beautiful; the statuette is beautiful in its data and the diamond is beautiful in its processes.

So too it is with the universe. The greatest and most beautiful truths are not the facts and events of the world, but the processes behind them. Facts and events are only the palpable manifestations of the grand processes by the which the universe turns. A game should strive to mirror those processes, rather than merely aping their issue.

Chris Crawford is a veteran game designer of titles such as Eastern Front and Excalibur. His newest release is Balance of Power by Mindscape.

CAST SPELL (cont.)

For many years the Japanese-US software pipeline has been practically a private Broderbund conduit, but now there are signs that other companies may want to share the trade. The **Black Onyx deal with Sierra** may be the beginning of several such deals as a revitalized Sierra starts to branch out again. Sir-tech is considering publishing an **all Japanese version of Wizardry**. The work will probably be done by Japanese programmers in Japan.

The acknowledged top deal maker on the new Orient Express is Ms. Kazue Osugi, who is president of the Oakland based Qualitas Trading Company. In dealing with a country like Japan where who you know is everything, Ms. Osugi can open magical doors to all the levels of computer software.

Japanese computer stores differ from American computer stores in one important area - they stock software! When you walk into a Japanese computer store you see it crammed from floor to ceiling with software. Not only do they carry hundreds of titles, but they also have a depth of 15 to 20 in each title. The dealers encourage customers to preview the software before purchase. That form of consumer consciousness is long, lamentably, dead in our country. Perhaps that is one reason why the computer industry is still so dynamic in Japan.

Look for many more fine Japanese adventure games to arrive on our shores and challenge the charts. Perhaps Japanese software will be able to succeed where Japanese hardware has failed so often.

CES REPORT (cont.)

Perry Mason: The Case of the Mandarin Murder: Telarium. Take on a tough case as one of the world's most beloved lawyers. Graphic adventure lets you do almost anything Mason would do from cross-examining the witnesses to introducing evidence and consulting privately with the judge.

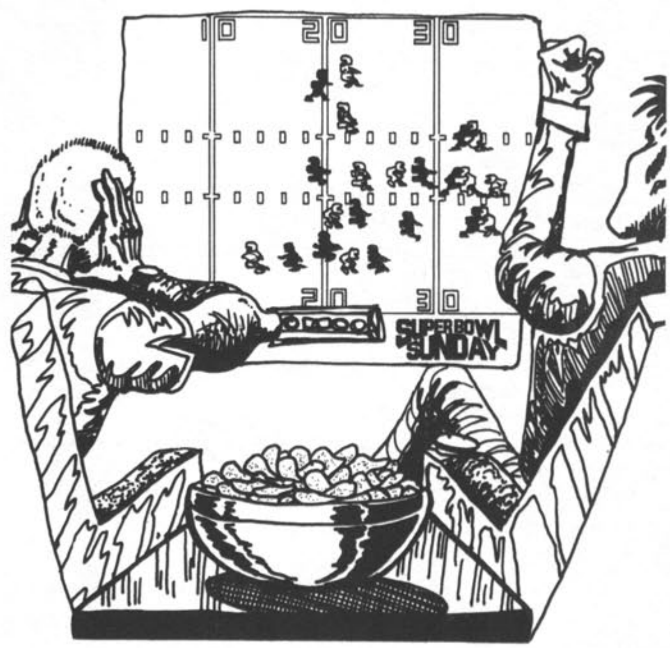
Star Trek: The Kobayashi Alternative: Simon & Schuster. An interactive text adventure with you in the role of Admiral James T. Kirk. Each of the familiar characters on board will react with familiar personality traits and will be invaluable to the successful completion of your mission.

Quations: Scholastic. Use numbers and math operations to fill in a Scrabble-like board for points. You can use just addition to give the youngsters a sportin' chance or take in all four basic math operations for a real challenge.

The Mist: Mindscape. Text adventure based on the Stephen King story about terror in a quiet New England town.

The Halley Project: Mindscape. The search is on for knowledgeable pilots for top secret space explorations. Complete a series of missions, then send a codeword to Mindscape and they'll put you onto the main task at hand.

These are just a few of the probably 100 new items shown at CES. Nintendo even offered an entirely new game system. Computers certainly aren't dying out and neither are the games.



can you now clearly distinguish the Knight's helmet, shield, and sword; you can even discern the gap in his visor and the insignia on his shield.

For greater flexibility, you can reuse the sprites to get more of them, or you can combine ("attach") them to get sprites of up to 15 colors. If you want still more, there are Bobs (short for "blitter objects" but perhaps not unrelated to the fact that seemingly every other person at Amiga -- including R. J. Mical, who wrote most of the sprite/Bob firmware -- is named "Bob"), which can be thought of as software sprites. While not as fast as real, hardware sprites, Bobs are essentially unlimited in size, shape, number, and color.

Sound on the Amiga actually lives up to its graphics. There are four separate audio channels, each of which can do a good job of matching the total sound output of an Atari 800 or C-64. More to the point, real-world sounds are possible for the first time: you can tape a song, a crash, a speech; digitize the sounds; and store and replay the results on an Amiga -- and it will sound like the original. It's not true Hi-Fi, but it's certainly the equal of anything you get out of your TV set. Equally revolutionary is the fact that the channels can be grouped as two stereo pairs. In addition to music in stereo, this allows you to fire a missile from one side of the screen to the other -- and have the sound of the missile follow along.

As a final treat, speech synthesis -- not in ROM but on disk -- is standard on the Amiga. No programming is required. One program translates into phonemes any text you type in; another takes those phonemes and renders it as speech. You can even play around with the sound of the voice if you want.

CONCLUSIONS

While I have left out more goodies than I have mentioned, it must surely be obvious that the Amiga includes all the tools -- memory, storage, sound, graphics -- to do every kind of computer game there is (and some that don't exist...yet). For the first time, designers can worry about straining the limits of their imagination rather than the limits of their chosen machine. For the first time, you can buy (for less than the cost of much of the competition!) a machine that is perfectly suited to your favorite sort of game without giving up the capabilities necessary for other kinds. If this combination does not spark a computer game/videogame Renaissance, nothing will.

You don't even have to give up respectability. For the first time, a machine designed with games in mind was also designed to be the best microcomputer on the market. Since you can hook it up to your TV, stereo, or VCR, and since it makes possible better word processors as well as better games, it virtually defines the term "home computer." Described variously as a "Mac-killer" and a "Sun-killer", the Amiga has the capability (as unlikely as it may be) to replace every micro on the market. At very least it has the capability to produce the biggest avalanche of trade-ins the industry has ever seen.

There is a hitch: software. No new machine is going to have the range of software available on a successful computer two or three years old.

This is clearly only a temporary problem. Although the first programmers are having as tough a time as the early Mac developers (and for much the same reasons), the program deluge is coming sooner than you think. Software companies are looking for a hardware savior to stimulate the market, and the consensus nominee is Amiga. Every programmer I know wants one for a personal toy, and some companies are already having trouble getting people to work on anything else.

There should be dozens of products available this fall in plenty of time for Christmas, but (for different reasons) two game companies should lead the pack. Thanks to a strong, early commitment, within the next two months Electronic Arts alone will be publishing more than a dozen new products for the Amiga: games and construction sets, music programs and productivity tools, new titles and enhanced versions of previously released products. (No doubt someone will complain about my mentioning this, but, yes, ARCHON and Archon II: ADEPT will be among them.) Since text adventures are relatively easy to convert, I would also expect Infocom's full line to be available almost immediately.

What else will be available in the same time frame I'm not sure, but there will be enough products -- and enough exciting products -- to ensure that the limiting factor in Amiga Christmas sales will be Commodore's ability to keep up with demand.

Following the convergence of programmers and the conversion to the Amiga (within 6-12 months) of just about everything already on the Mac, an unprecedented wave of standardization will center on 68000 machines in general and the Amiga in particular. By Christmas of 1986, 8-bit machines won't be sold outside antique stores, and only the most ossified of East Coast corporations will still be buying IBM PCs.

As an interesting corollary, assembly language, the gaming standard of the first half of the 80s, is doomed -- partly by chip and machine incompatibility, but mostly by time: writing 256K programs in assembler is not a job; it's a career. The language of choice for the next few years is clearly C. (BASIC's been obviously too slow for five years; FORTH is bass-ackwards and, on the evidence, a software black hole; PASCAL is just a constipated C.) The fact that C is, for practical purposes, the Amiga's native language, will just make the changeover that much faster.

The personal computer revolution has been stalled for a couple of years for reasons that are no big secret: marketplace confusion, uninspiring software, lack of standardization. Computer companies have been the obvious scapegoats: software developers could blame hardware limitations and conversion difficulties; adherents of incompatible micros could blame manufacturers for not coming up with anything that deserved to be a standard.

With the arrival of the Amiga, everyone just ran out of excuses.

DISPATCHES (cont.)

for anyone involved in software or game design. In fact, it is so well written and so informative that I would recommend it to anyone interested in communication in general.

There is no way I can do justice in a short column to the material Heckel covers. However, I will mention a few of the fascinating things I learned from his book. Heckel chose filmmaking as the ideal art form for teaching software folks about communication. Apparently, filmmaking went through a transition from an engineering discipline to an art form much like software design is doing now. Thomas Edison, the inventor of filmmaking technology, said at one time "Eight minutes on a single story, it won't sell. People want variety. At least four or five subjects on every eight minute reel." From Heckel:

> Movies did not flourish until the engineers lost control to... the communications craftsmen. The earliest filmmakers did little more than point the camera at an interesting event and turn the crank. If one person can be credited with inventing the film as art it is D. W. Griffith. With "Birth of a Nation" filmmaking became what it is today - the art and craft of using film to communicate to an audience. Friendly software design is in much the same state that filmmaking was at the time of "Birth of a Nation". To make our products useful to new audiences, we have to identify and develop the equivalents of the filmmaker's techniques--close-up, moving shot, editing and so on. We already have some of these techniques - menus and cursor control, for example - but just having them is not enough; many of Griffith's techniques were first used by others. Even more important, we have to learn to use our techniques to communicate more effectively to our users. We can only do this by changing our perspective of software design from WHAT the software does to HOW it does it--from an engineer's perspective to an artist's.

Not bad stuff! The only point I would like to add is that by the very fact of describing software (game) design as a communication craft, we place the responsibility for effectively communicating on the originator. Almost every game designer has had at least one product that failed in the marketplace. Although we would love to claim that the audience "just didn't get it", we know better. In any case, it's more appropriate for game designers to work smarter than for game players to settle for less!

Dan Bunten is the author of Computer Quarterback, Cartels & Cutthroats, and Cytron Masters available from Strategic Simulations. He is the lead designer of the Ozark Softscape group that wrote M.U.L.E., Seven Cities of Gold and Africa available from Electronic Arts.

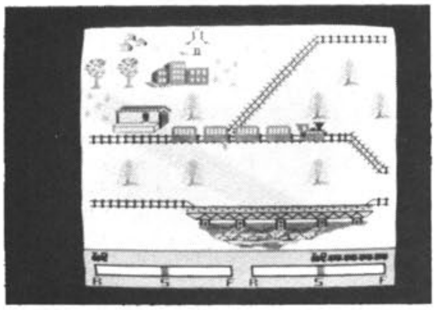
ULTIMA (cont.)

just a click of the mouse initiates a helpful pause in the action. About half of the screen consists of the map window; other windows display a command journal, the character's status, and the character's possessions.

While faithfully translating Richard Garriott's original program, Sierra On-Line's Bob Heitman has made good use of the Mac's user interface. Players can easily access the pull-down menus to choose armor, weapons, and spells, and may rapidly select game commands such as attack, transact, steal, bribe, launch, view, and resurrect. The graphics are sharp, and the lack of color is not a significant deficiency. The sound consists of irritating static, but it can be toggled off.

Although ULTIMA II is an exciting -- even indispensable -- addition to any Mac owner's game library, this version unfortunately contains a number of atrocious misspellings ("paralized," "caugh") and bugs: Female characters undergo an irreversible sex change when their attributes are modified; certain guards are immobile and cannot be attacked; the display flickers when new items are obtained; provisions are not consumed when traveling by frigate, plane, or rocket. It is also very difficult to distinguish villages, especially when they are situated near a forest. It is hoped that Sierra On-Line will soon correct the minor problems that prevent ULTIMA II from being an otherwise flawless game.

THE RAILROAD WORKS



The major trend in model railroading over the past few decades has been toward smaller and smaller scales, reflecting the increasingly cramped quarters most of us inhabit. The Railroad Works (TRW) from CBS Software takes this trend about as far as it can go, compressing an entire model railroad construction kit into the space of a floppy disk. We might call this "binary gauge". Some severe design compromises were necessary to compress the three-dimensional world of model trains into the two-dimensional environment of the computer display screen. Nevertheless, this is a solidly crafted and highly entertaining product.

The best entertainment software usually combines elements of creative imagination with the competitive play features of hand-eye coordination and reaction time. TRW is extremely flexible in this respect. You can create your own model train layout from scratch, and operate for the sheer joy of going "choo-choo", or you can call up a ready-made array of track and scenery from the disk, and play for points as you race to deliver boxes of software, tanks of water, cattle and carloads of passengers.

On the 48K Apple version, the program has an unusually long loading time. Your wait is rewarded with a nice bit of music An opening menu prompts you to select joystick, mouse or keyboard cursor control. You really need a joystick or mouse, the keyboard is too slow. The main menu selections include: Construct, Operate, Play Game, Save, Load, Clear Layout and Change Engine and Cars.

To construct a layout, you move the cursor to lay track, position scenery and locate your factories, depot water tanks and similar economic assets. The C-64 version has a richer selection of scenery and graphics. Any layout you create can be named, saved to disk and later recalled.

The trains themselves can only be described as cute. You have a choice of 19th Century steam or modern diesel-electric locomotives and corresponding freight, tank, cattle and passenger cars. Throttle control and switching are handled very nicely. You select the engine throttle icon, which gives you a throttle display indicator at the bottom of the screen. You then use the joystick to move between Reverse, Stop and Forward. Your locomotive, and everything attached, moves as you command. To throw a switch, you position the cursor at the junction of two tracks and click the joystick button. Loading and unloading cargo is accomplished in the same way, with some very clever animation effects. For example, to unload freight cars a tiny fork lift truck comes out and carries away boxes.

By selecting the map icon, you can view a schematic layout of all twelve screens, with the depots and the current locations of your two trains indicated.

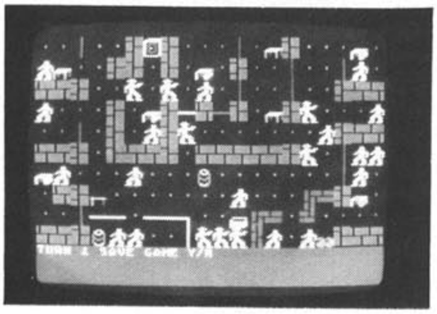
Collisions are possible, but utterly harmless. The trains just stop, there are no derailments in binary gauge.

TRW is not a complete simulation of railroading, or even of model railroading, but it is great fun. It is a creative, non-violent entertainment. The C-64 and IBM versions are rather better than the Apple version. Younger users may need a bit of help and encouragement before they get the hang of moving among the many options and functions. Boot up, and all aboard! Apple, C-64, IBM.

Mike Markowitz

[Ed. Note: Mike is Games Editor for Microtimes magazine and has had reviews published in the US Naval Institute Proceedings and other publications.]

SIX-GUN SHOOTOUT



Tuco's smile was a mixture of annoyance and amusement. He was unaccustomed enough to hot baths to resent the intrusion of any member of the male sex into his private paradise, but it struck his sadistic sense of humor to think of the interloper's expression when he looked behind the screen and found the tub empty. Tuco tensed his finger gently back on the trigger as the one-armed would-be assassin peered around the screen to find his target absent from the tub and a lead "No Trespassing" sign headed for his chest. A look of disbelief was permanently etched upon his visage as his form fell into the tub and his own blood turned the bathtub water into a rusty liquid cesspool of death.

Such is the opening encounter of one of the scenarios of Six-Gun Shootout (SG), one of the latest releases from SSI. SG is a game of man-to-man combat in the days of the "Wild West" with an appearance reminiscent of Galactic Gladiators. The game consists of ten scenarios based on the "Wild West" of Hollywood and popular legend with a modicum of history thrown in. The object of the game is to survive, not necessarily to use the historically correct weapon in the exact historical locale. For example, the "Gunfight at the O. K. Corral" actually takes place in the corral for the scenario. However the local Tombstone newspaper published eyewitness reports that made it clear that the gunfight took place in the street outside the corral (the intersection of Third and Fremont) and local historian John Myers notes that the bad guys ended up holed up in C. F. Fly's photography studio (DOC HOLLIDAY. Lincoln, Nebraska: University of Nebraska Press, 1955, p. 141).

Nevertheless, the scenarios are challenging and worth playing. SG also offers a campaign game in which the player can create and arm a "personal character" and attempt to have him survive all ten scenarios (Hint: In order to accomplish this, the player should definitely be a "good guy", otherwise he will not likely survive the "Shootout at Stinking Spring" scenario where Pat Garrett parlayed a 12-5 advantage into the death of "Billy the Kid.").

Although the game mechanics are similar to those in Galactic Gladiators, Six-Gun's mechanics are smoother. The capacity for hidden movement is an improvement that is quite useful and impressive. Each character is also able to use "cover" more effectively as the options of allowing the characters to be prone, kneel or stand affects line of sight differently than the line of sight in the earlier game. The game also has a "View" command which allows each character to test the line of sight against the other characters prior to ordering a character to shoot at a target. Unlike the earlier game of man-to-man combat, SG isn't very flexible in creating one's own scenarios. The earlier game had a tremendous capacity for designing scenery and characters to fit fictional situations. In SG, there is no built in mechanism for creating such scenarios, only modifying the existing ten scenarios. It is to be hoped that if SG is a successful game in sales that such a "construction kit" might be available as an additional diskette. Otherwise, SG is a superior game.

Each scenario involves the movement and combat of two "teams": "The Good Guys" and "The Bad Guys." The scenarios include: "The Gunfight at the O. K. Corral,"; "The Good, Bad, The Ugly"; "Rio Bravo"; "Shootout at Stinking Spring"; "The Battle of Ingalls"; "The Dalton's Demise"; "El Siette Magnifico"; "Northfield Nightmare"; "The Treeing of Placid"; and "Indian Raid." The first, fourth, fifth, sixth and eighth listed scenarios are based on historical situations. The second, third and seventh are based on recognizable movie situations. The final two are generic "might have happened" scenarios. Depending on preference, the player could end up controlling Wyatt Earp, Billy the Kid, Jessie James, Doc Holliday, Pat Garrett, or The Man with No Name (Blondie).

The commands are simple. Each char-

Continued on pg. 47

Sierra On-Line
Sierra On-Line Building
Coarsegold, CA 93614
209-683-6858

CHAMPIONSHIP BOXING: This one got the gang in the office all worked up. Sharp graphics and good feel for the sport of boxing. You are given a choice of 54 boxers, ranging from John L. Sullivan (1885) to Marvelous Marvin Hagler. You can also create your own boxers. You can choose to fight in an arcade mode, with each move and punch entered, or simulation mode, in which you select a strategy for your boxer at the beginning of each round (go for the body; protect your head; go for the knockout; etc). If you find a boxer that can beat Rocky Marciano, let us know! Jack Dempsey came closest for us. IBM 128K.

Circle Reader Service #40

Simulations Canada
PO Box 452
Bridgewater, Nova Scotia
Canada B4V 2X6

GOLAN FRONT: A simulation of the 1973 Arab/Israeli war, featuring the battles in the north between Syria and Israel. As with all Simulations Canada games, the computer displays text descriptions of game activities which are followed on a map with counters. The computer can play play either side. Apple, C-64.

Circle Reader Service #41

Software Country
270 North Canon Dr #1297
Beverly Hills, CA 90210
213-278-8450

GOLDEN OLDIES: An esoteric entry. A collection of original, "uncut" software classics such as Pong, Adventure, Life and Eliza. For trivia fans, the president of Software Country is Les Crane of '60s television and winner of a Grammy for "Desiderata". Many computers. $29.95.

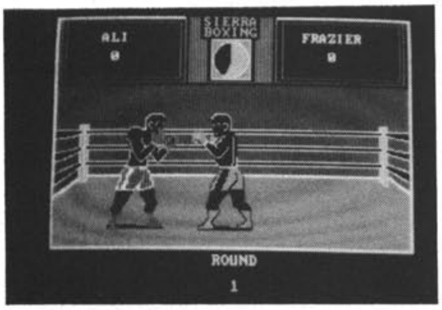
Circle Reader Service #42

Strategic Simulations
883 Stierlin Road
Bldg A-200
Mountain View, CA 94043

Circle #43

MECH BRIGADE: Advanced tactical level simulation, based on modern weaponry. Pits Soviet vs NATO forces using approximately 45 different vehicles, plus guided missiles, helicopters and artillery. Game structure is virtually identical to KAMPFGRUPPE. Four historical scenarios plus the ability to create scenarios, including designing your own terrain features. This one is already a best-seller and deservedly so. Apple & C-64. $59.95.

COMPUTER QUARTERBACK: This is the second edition of CQ and packs several added options. A Pro Draft allows you to create a team in your own image, there are additional plays (36 offensive plays, 24 defenses) and enhanced artificial intelligence. The Robot Team will "learn" your tendencies and make adjustments. Solid sports product. Many computers. Joystick/paddle required. $39.95.



CHAMPIONSHIP BOXING



GOLAN FRONT


GOLDEN OLDIES

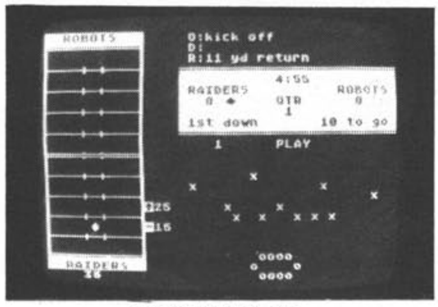
Circle Reader Service #76

COLONIAL CONQUEST: Arrived just before deadline and is getting a lot of play. Strategic game covering the period of colonial expansion (late 1800's on). Choose one of six countries and attempt to conquer the entire world. The computer will play any or all of the countries. Tax your lands and use the money for espionage, subversion, economic aid or simply buying armies and fleets. Excellent scrolling color graphics. Joystick control. Atari & C-64. $39.95.

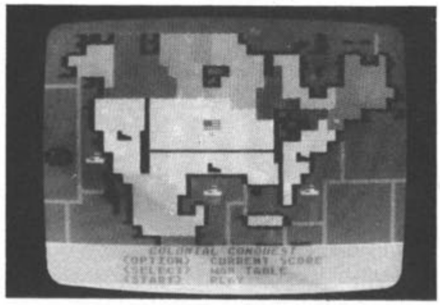
Strategic Studies Group
1747 Orleans Ct.
Walnut Creek, CA 94598
415-932-3019

REACH FOR THE STARS (SECOND EDITION): Takes an already popular game and makes it better. Enhanced computer opponents, limited intelligence, random game generation, improved (and slick) player aids, variable victory conditions and an improved menu structure. We liked the first edition and the enhancements make this one of the best space games around. Apple & C-64. $45.00.

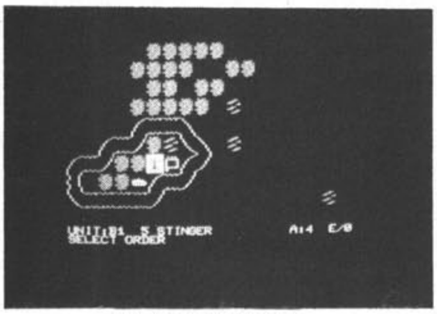
Circle Reader Service #44



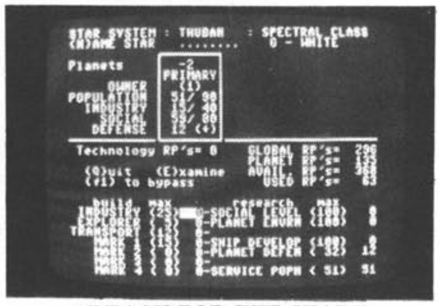
COMPUTER QB



COLONIAL CONQUEST



MECH BRIGADE



REACH FOR THE STARS

Circle Reader Service #45

Circle Reader Service #46

After much advance publicity, Gamestar has finally released **On-Track Computer Model Car Racing**. The game is a disappointment. The game pales by comparison with every computer racing game I've ever seen on the market.

There are 10 tracks included, most modeled after famous layouts. You view the game from the overhead perspective with extremely spartan graphics. There is no such thing as a spin out, only a trip off the road and into the grass, which only slows you down. When two cars collide they merely do several rotations and go their merry way.

There are three characteristic drivers to assign to the computer or take yourself. The races can be against time only, against the computer or head-to-head. Races can be five or 10 laps or endurance races of either a simulated 12 or 24 hours.

Either way it is a test of endurance just to play this game for more than 15 minutes at a stretch. It's not that the game is too easy, for racing against a computer foe for 10 laps when you must shift your own gears is indeed difficult, but there just isn't much substance to the game. I guess even a company with the fine reputation of Gamestar can "miss" once in a while.

Next time we'll peek at The Great American Cross Country Road Race by Activision, the General Manager's disk for Micro League Baseball (if they ever get it out) and a supplemental course disk for SSI's Professional Tour Golf.

The Commodore Key

Roy Wagner

SOUND AND FURY

SAY WHAT?

Recently, we have been seeing quite a lot of new software adding speech to the list of game features. Very handy for spelling programs and adding an interesting new dimension to games, the C-64 easily lends itself to this capability. The first major product which came out was S.A.M. (Software Actuated Mouth). It gave the computer the capability to speak and the user the ability to add that capability to their written software. It showed that it could be done with NO add-on hardware. It was all done with the magic of software and the SID chip in the C-64.

Then came other implementations. Ghostbusters from Activision and Impossible Mission from Epyx have their moments of speech. Now several games are using it. Many implementations are still crude and certainly sound like computer generated voices, but others are now sounding very good. Kennedy Approach from MicroProse has some good speech. The most impressive voices I have heard recently are those of Barbie and Ken in the Barbie game from Epyx. These voices sound very clear and realistic: as if tape-recorded. I hope these represent the new level of speech which can be expected from digitized sound, as opposed to the current computer simulated patterns.

I should mention that the Barbie game is not recommended, except to hear the voice. Young kids (under ten) may love it, but it will drive anyone else insane. The game is very simple and terribly frustrating. The "buy" ethic and male chauvinism of the game is too much for most people.

FAST, FASTER, FASTEST

In order to speed up C-64 disk access, several software implementations are available; Kwik Load, Turbo 64 and even one published by Compute magazine. When these work, they are great: but they have to be loaded into memory somewhere. That somewhere is often the same somewhere that your favorite game uses for code. As a result of these conflicts, many new games incorporate fast load code with the program itself.

Another method of speeding up disk access with the 1541 Commodore drive is to use a fast load cartridge. While there are now several available, I have only used Fast Load from Epyx. It is an excellent product which is not only compatible with most software but includes several handy features, such as "wedge commands" to simplify disk commands, file and copy programs and a machine language monitor. There are all accessible from a menu and do not require SYS commands to implement. If there is a conflict with the software the cartridge can easily be disabled with a single command. A final method to speed disk access is by installing modified ROM chips in the C-64 and 1541. The best implementation I knowof is a product called Flash, by Skyle's Electric Works. If your ROMs are not soldered in then installation is technical but fairly easy with clearly written instructions. Included is a switch for each ROM that permits you to return to your original ROMs if any problems occur. Some programs have a problem loading at the higher speeds, Flash can slow down access with a software command. The product includes several utility commands and "wedge" which can be brought into use by a SYS command giving you simplified disk commands. I have found Flash to be compatible with nearly all software. In terms of price, the Fast Load cartridge, at $25-35 is a bargain and a best buy for anyone. Flash costs about $90 but offers multiple machine discounts. Many dealers will install it for about $25. If you seriously need fast loading all the time, I highly recommend Flash.

GAME OF THE YEAR



Computer Gaming World proudly announces the COMPUTER GAMING WORLD AWARDS which are to be awarded to the best war, strategy, adventure, and action games of the past year.

As with our popular R.I.D. rating system, you, our readers, will make the actual selections.

The staff of CGW has compiled a list of nominees for BEST GAME in each of four categories. Please use the RID card opposite page 9 of this issue to enter your votes on these games. Using the first five spaces on the RID card, place the corresponding letter for the game of your choice in the appropriate space. In space five go back through the list of nominees and select the letter which corresponds to your choice for BEST GAME OVERALL.

Please mail your ballot before Sept. 27, 1985.

1. WARGAME of the Year: (choose one only)
A) Ancient Art of War
B) Carriers at War
C) Crusade in Europe
D) GATO
E) Gulf Strike
F) Kampfgruppe
G) War in Russia

2. ADVENTURE Game of the Year: (choose one only)
H) Hitchhiker's Guide/Galaxy
I) Legacy of Llygamyn
J) Mindwheel
K) Phantasie
L) Questron
M) Sorcerer
N) Ultima III

3. STRATEGY Game of the Year: (choose one only)
O) Computer Quarterback
P) Flight Simulator II
Q) MicroLeague Baseball
R) M.U.L.E.
S) Reach for the Stars
T) Seven Cities of Gold
U) Universe

4. ACTION Game of the Year: (choose one only)
V) Archon I
W) Ballblazer
X) Choplifter
Y) F-15 Strike Eagle
Z) Lode Runner
AA) One on One
BB) Skyfox

5. GAME OF THE YEAR (Choose the letter of ONE game from the above lists)

READER INPUT DEVICE

RID #21 (use card at page 9)

On this page a number of games are listed for evaluation. When evaluating a game consider such things as PRESENTATION (graphics, sound, packaging, documentation); GAME DESIGN (design, playability, interesting?); LIFE (does the game wear well?)

For each game you rate place a 1 (terrible) through 9 (outstanding) next to the appropriate number. Leave blank any game which you have not played enough to have formed an opinion.

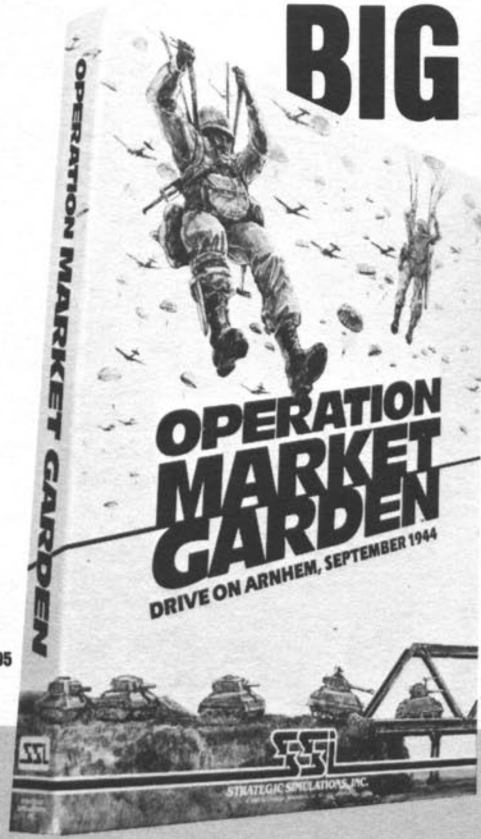
Please mail R.I.D. #21 before Sept. 27, 1985.

6. Kampfgruppe (SSI)
7. Crusade in Europe (MicroProse)
8. M.U.L.E. (EA)
9. Ancient Art of War (Broderbund)
10. Carriers at War (SSG)
11. War in Russia (SSI)
12. Operation Market-Garden (SSI)
13. Guadalcanal Campaign (SSI)
14. Fighter Command (SSI)
15.Field of Fire (SSI)
16.Micro League BB (Micro League)
17.APBA Mjr Lg Plrs BB (Random Hs)
18.Carrier Force (SSI)
19.Seven Cities of Gold (EA)
20.GATO (Spectrum Holobyte)
21.Computer Quarterback (SSI)
22.North Atlantic 1986 (SSI)
23.Flight Sim II (SubLogic)
24.Rails West (SSI)
25.Broadsides (SSI)
26.At the Gates of Moscow (SGP)
27.Mech Brigade (SSI)
28.Nato Commander (MicroProse)
29.Imperium Galactum (SSI)
30.Reach for the Stars (SSG)
31.Wizardry I (Sir-tech)
32.Ultima III (Origin)
33.Zork series (Infocom)
34.F-15 Strike Eagle (MicroPrs)
35.Archon I (EA)
36.Legacy of Lylgamyn (Sir-tech)
37.Knight of Diamonds (Sir-tech)
38.Ultima II (Origin)
39.Sorcerer (Infocom)
40.One on One (EA)
41.Ballblazer (Epyx)
42.Questron (SSI)
43.Racing Destruction Set (EA)
44.Phantasie (SSI)
45.Hitchhiker's Guide (Infocom)
46.Rescue on Fractalus (Epyx)
47.Archon II: Adept (EA)
48.Suspect (Infocom)
49.Gemstone Warrior (SSI)
50.Murder on Zinderneuf (EA)
51.Sword of Kadash (Penguin)
52.Kennedy Approach (MicroPrs)
53.Six Gun Shootout (SSI)
54.Lordlings of Yore (Softlore)
55.Suspended (Infocom)

56.Market-Garden review
57.Amiga story
58.Cover artwork/style

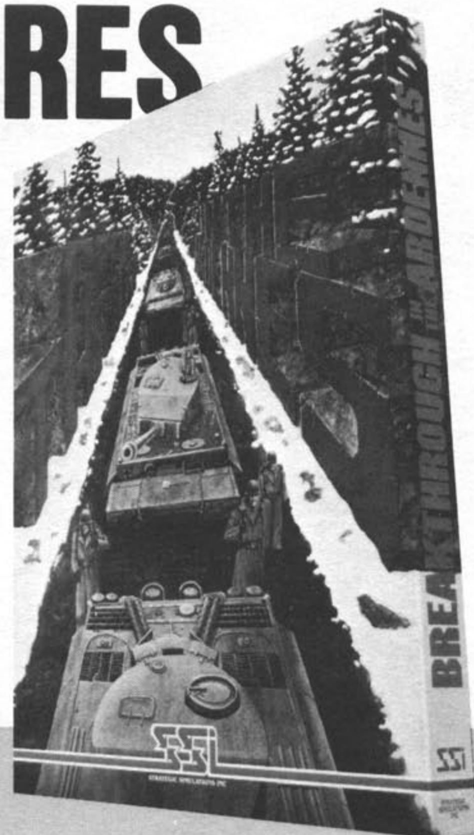
59.I want more coverage of (one only): 1 = Strategy/Wargames; 2 = Adventure/RPG games; 3 = Arcade games; 4 = Sports games.
60.What computer(s) do you own? 1 = Apple; 2 = Atari; 3 = Commodore 64; 4 = IBM PC/JR; 5 = Macintosh; 6 = Other (please specify).

BIG FAILURES MAKE GREAT GAMES.



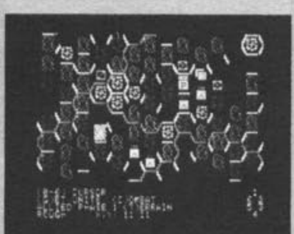
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1944 saw two of the worst failures of World War II: Field Marshal Montgomery's disaster at Arnhem in September and Adolf Hitler's debacle at the Battle of the Bulge in December. In the belief that today's wargamers might do better if given the chance, SSI has created two gaming triumphs: OPERATION MARKET GARDEN™ and BREAKTHROUGH IN THE ARDENNES™, both by the authors who gave you the award-winning "Knights of the Desert™" and "Battle for Normandy™."



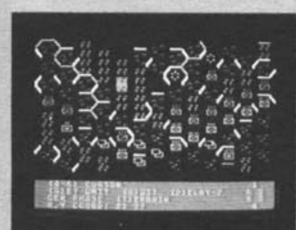
OPERATION MARKET GARDEN™

Montgomery's brainchild required three Allied airborne divisions to secure six bridges in Holland, effectively opening a way for the 30th Corps to cross into Germany. But due to hasty strategic decisions and bad luck, Operation Market Garden fell one bridge too short — and failed.

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- Historical and free set-up scenarios with a hidden unit option, covering the battle from September 17 through 26 in ten turns.
- Game play covers airstrikes, command control through headquarters, combat, and cross-river assaults with airborne/engineer units.
- Weather conditions such as overcast, cloudy, and clear affect availability of airstrikes and reinforcement/supply drops.
- Tactical flavor that allows you to decide who goes first into battle, plot offensive and protective barrages, and change units between normal and travel modes.
- Scrolling Hi-Res color display covers 31 x 32 hexagonal grid map (each hex equals two miles), showing complete road network, terrain, bridges, towns and cities.
- Two-player and computer-as-German scenarios.
- Designed for wargamers of all levels: ADVANCED GAME and simpler INTERMEDIATE GAME included.



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On December 16, Hitler launched a massive surprise assault against the thin Allied lines in the Ardennes forest. His blitzkrieg achieved temporary success, but shortages of fuel and supplies coupled with staunch American resistance led to Hitler's resounding defeat at the Battle of the Bulge.

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- Three scenarios covering the battle from December 16-27.
- Game play includes blowing and building bridges, constructing fortifications, allocating artillery support, and combat.
- Units can enter/leave travel mode and trace supply routes along the extensive Ardennes road network. Supply states are "supplied," "unsupplied," and "isolated."
- Over 200 units represented, including infantry, airborne, engineer, armor, panzergrenadier, and recon.
- Weather affects air power, which is used to strafe enemy units on the road or interdict their strength and movement capability.
- Ground freeze, which facilitates movement by icing up mud on the roads, is taken into account.
- 31 x 32 hexagonal grid map represented by scrolling Hi-Res color display.
- Two-player and computer-as-American scenarios.

Look for these gaming successes at your local computer/software or game store today!

APPLE, ATARI, and COMMODORE 64 are trademarks of Apple Computer, Inc., Atari, Inc. and Commodore Electronics, Ltd., respectively.

SSI™

Both games are on 48K diskette for Apple® II with Applesoft ROM, II+, IIe and IIc; 48K diskette for Atari® home computers; and 64K diskette for Commodore 64™.

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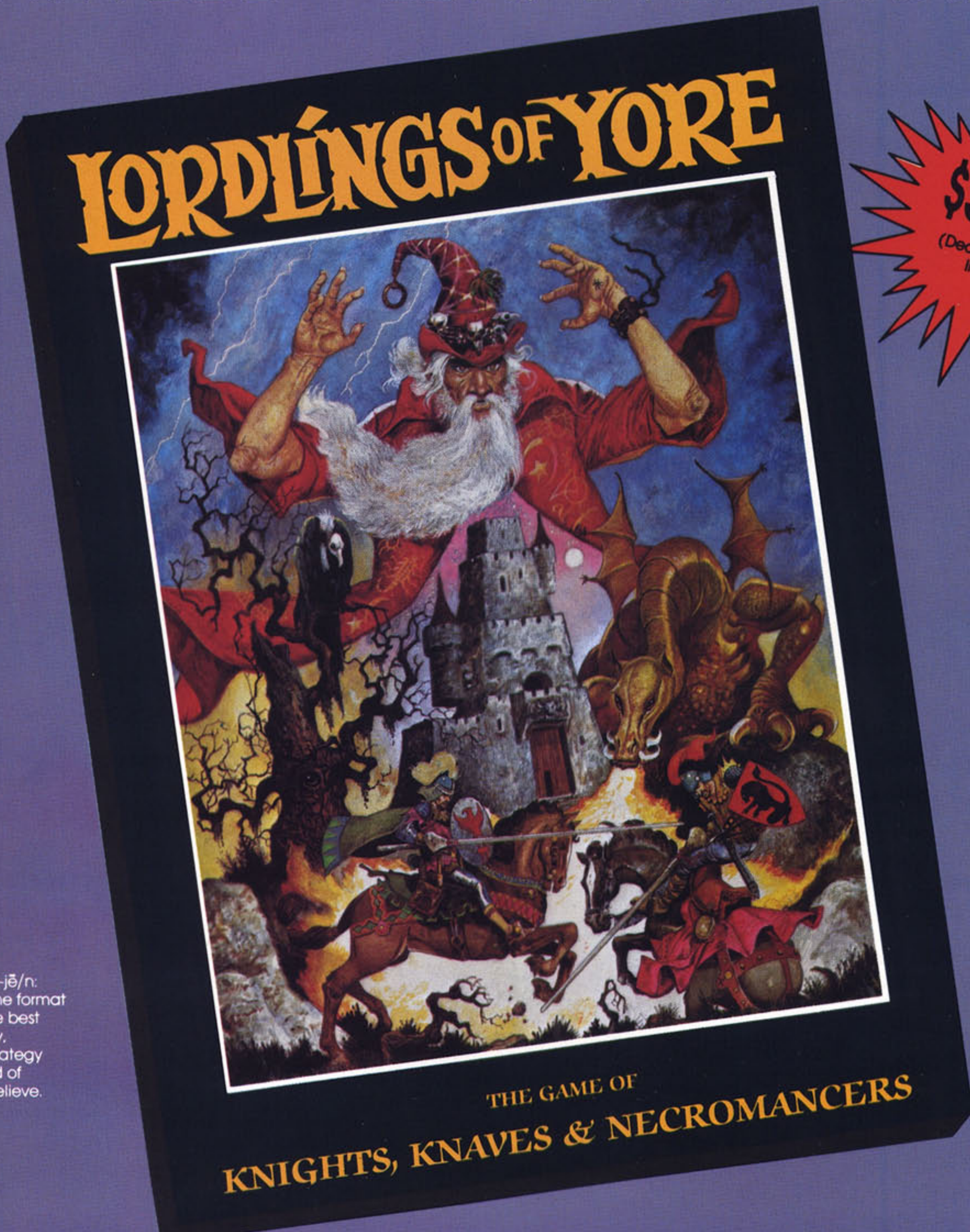
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SIX GUN (cont.)

acter may: ready a weapon; load a weapon; fire; move according to an 8 position grid; stand; become prone; kneel; use dynamite; and/or view potential lines of sight. Each character phases by move segments according to a formula for character movement rate combined with weapon movement rate. The character movement rate is not static, being modified by such things as health condition and body position.

SG is an relatively simple, fast-moving and enjoyable game. It is satisfying and clear-cut in its determination of victory points and victory. One only wonders if the allowable adjustments to the ten scenarios will allow it to have as long a shelf life as previous SSI games. Apple, Atari, C-64. $39.95.

Johnny Wilson

Vote for the Game of the Year on Page 41

READER INPUT DEVICE

This issue's RID Ratings constitute the next step in our continuing effort to make this information as useful as possible. We have divided the games into two groups - Strategy and Adventure/Action - to avoid the problem of comparing apples and oranges.

We have also noted the number of times each game has been rated and the number of times each game has made the Top Ten. The "Rating" is an average of all scores in all RIDs for that particular game.

Two notes of interest: Kampfgruppe received the highest rating yet seen for a strategy game; the Wizardry series (with three entries) has been rated 30 times, rating in the Top Ten 29 times!

STRATEGY

		Times Rated	Top Ten	Rating
Kampfgruppe	SSI	1	1	8.17
Crusade in Europe	MicroPrs	1	1	7.61
M.U.L.E.	EA	11	10	7.60
Ancient Art of War	Brodrbnd	2	1	7.58
Carriers at War	SSG	2	2	7.57
War in Russia	SSI	4	4	7.46
Operation Mkt Grdn	SSI	1	1	7.40
Guadalcanal Cmpaign	SSI	7	6	7.36
Fighter Command	SSI	6	4	7.34
Field of Fire	SSI	2	1	7.33
Universe	Omnitrend	2	1	7.29
Micro League BB	MicroLg	1	0	7.29
Carrier Force	SSI	4	3	7.24
Seven Cities Gold	EA	6	5	7.24
Computer Ambush	SSI	5	3	7.20
Flight Sim II	SubLgc	4	2	7.12
Combat Leader	SSI	5	3	7.11
Computer Baseball	SSI	6	4	7.10
Galactic Gladiators	SSI	3	2	7.07
GATO	Spctrm Hb	1	0	7.07
N. Atlantic '86	SSI	1	0	7.00
Reach For the Stars	SSG	2	0	6.95
Excalibur	Atari	1	0	6.85
Cosmic Balance	SSI	5	3	6.83
Bomb Alley	SSI	4	3	6.82
Eastern Front	Atari	4	2	6.81
Computer Qrtrbk	SSI	1	0	6.79
North Atlantic 86	SSI	1	0	6.79
Southern Command	SSI	5	3	6.79
Star League BB	Gamestar	1	0	6.78
Battle For Normandy	SSI	2	0	6.77
Gulf Strike	AH	4	0	6.75
Geopolitique 1990	SSI	3	0	6.73
Rails West	SSI	2	0	6.73
Cartels & Cthrts	SSI	4	2	6.62
Knghts of Desert	SSI	5	2	6.61
Broadsides	SSI	3	0	6.54
Fifth Eskadra	Sim Can	2	0	6.53
Kennedy Approach	MicroPrs	1	0	6.47
Robotwar	Muse	3	1	6.44
Legionnaire	AH	3	1	6.31
Grey Seas/Skies	Sim Can	4	0	6.24
Fortress	SSI	2	0	6.16
Nato Commander	MicroPrs	2	0	6.10
Panzerjagd	AH	1	0	6.08
T.A.C.	AH	1	0	6.00
Close Assault	AH	1	0	5.84
President Elect	SSI	2	0	5.83
Andromeda Conq	AH	1	0	5.68
Fall Gelb	Sim Can	3	0	5.41

ADVENTURE/ACTION

		Tms Rated	Top Ten	Rating
Wizardry I	Sir-tech	15	15	7.78
Ultima III	Origin	9	9	7.62
Zork series	Infocom	6	6	7.25
F-15 Strike Egl	MicroPrs	3	2	7.23
Archon I	EA	9	8	7.22
Legacy of Llygamyn	Sir-tech	5	4	7.20
Knight of Diamonds	Sir-tech	10	10	7.19
Ultima II	Origin	7	5	7.18
Sorcerer	Infocom	3	2	7.18
One on One	EA	6	4	7.17
Ballblazer	Epyx	1	0	7.15
Planetfall	Infocom	2	0	7.14
Questron	SSI	3	2	7.13
Choplifter	Brodrbund	4	3	7.13
Pinball Con Set	EA	4	4	7.08
Lode Runner	EA	6	2	7.07
Racing Dest Set	EA	1	0	7.03
Suspended	Infocom	4	2	7.02
Phantasie	SSI	1	0	7.00
Hitchhiker's Guide	Infocom	2	1	6.98
Ultima I	Origin	2	0	6.96
Deadline	Infocom	3	1	6.94
Olympic Decathalon	Microsft	4	2	6.86
Rescue on Fractalus	Epyx	1	0	6.84
Archon II	EA	3	1	6.80
Summer Games	Epyx	2	0	6.79
Karateka	Brodrbnd	1	0	6.72
Rescue Raiders	Sir-tech	1	0	6.65
Witness	Infocom	1	0	6.61
Timeship	Five Star	1	0	6.60
Infidel	Infocom	2	0	6.57
Spy vs Spy	First Str	1	0	6.57
Mig Alley Ace	MicroPrs	3	0	6.55
Suspect	Infocom	2	0	6.54
Solo Flight	MicroPrs	3	0	6.42
Advent Con Set	EA	1	0	6.42
Gemstone Warrior	SSI	1	0	6.40
Mail Order Monstr	EA	1	0	6.35
Sword of Kadash	Penguin	1	0	6.33
Murder on Zinder	EA	3	1	6.29
Mask of the Sun	Brodrbnd	1	0	6.27
Beyond Castl Wolf	Muse	1	0	6.25
Seastalker	Infocom	1	0	6.17
Realm of Imposs	EA	2	0	5.96
Timezone	Sierra	1	0	5.92
Mr. Robot	Datamost	1	0	5.90
Arcade Machine	Brodrbud	1	0	5.76
Zenji	Activisn	1	0	5.53
Wrlds Grtst BB Gm	Epyx	1	0	5.36
Telengard	AH	3	0	5.11

OMNITREND'S

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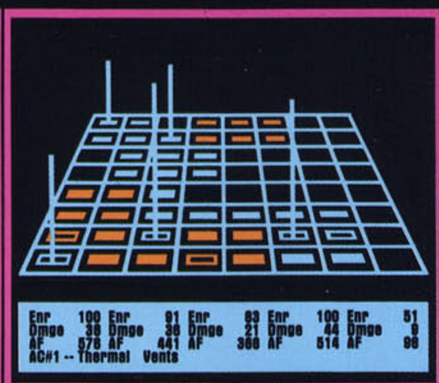
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